

HEARING  
BEFORE THE  
CALIFORNIA ENERGY RESOURCES CONSERVATION  
AND DEVELOPMENT COMMISSION

In the Matter of: )  
 )  
Application for )  
Certification for the ) Docket No. 98-AFC-3  
DELTA ENERGY CENTER )  
(CALPINE CORPORATION and )  
BECHTEL ENTERPRISES, INC.) )  
----- )

2500 ANTIOCH-PITTSBURG HIGHWAY  
ANTIOCH, CALIFORNIA

THURSDAY, NOVEMBER 18, 1999

5:00 P.M.

Reported by:  
Debi Baker  
Contract No. 170-99-001

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

COMMITTEE MEMBERS PRESENT

William A. Keese, Chairman, Presiding Member

Robert Pernell, Commissioner, Associate Member

STAFF PRESENT

Susan Gefter, Hearing Officer

Major Williams, Jr., Hearing Officer

Cynthia Praul, Adviser to Chairman Keese

Paul C. Richins, Jr., Siting Project Manager

Dick Ratliff, Senior Staff Counsel

Michael Ringer

Amanda Stennick

Magdy Badr

Guido Franco

PUBLIC ADVISER

Roberta Mendonca

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California Unions for Reliable Energy (CURE)  
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Paulette Lagana  
CAP-IT

Joe Hawkins  
Community Health First

Jack R. Hall, P.E.  
Public Works Department  
City of Antioch  
City Hall, Third and H Streets  
Antioch, California 94531-5007

Avan Gangapuram, Project Planner  
Randy Jerome, Manager Planning Division  
City of Pittsburg  
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INTERVENORS PRESENT

Gerald L. Dunbar, Director  
City of Pittsburg  
Economic Development Department  
415 Railroad Avenue  
Pittsburg, California 94565

Jim McDonald, Community Health First  
Trustee, Board of Education  
Pittsburg Unified School District  
2000 Railroad Avenue  
Pittsburg, California 94565

Michael Boyd  
Californians For Renewable Energy

ALSO PRESENT

Dennis Jang  
Bay Area Air Quality Management District

Darnell Turner  
Political Action Chairman  
California Branches of the NAACP for Northern  
California Section of the State Conference

Tom Baca  
Vice President, Central Labor Council of Contra  
Costa County; Vice President, Building Trades of  
Contra Costa County; Boilermaker Local 549,  
Pittsburg, California

William Leroy

Bill Forrest

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

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1 P R O C E E D I N G S

2 5:10 p.m.

3 PRESIDING MEMBER KEESE: Good evening,  
4 we'll call this hearing to order. We're here  
5 again to conduct administrative hearings on  
6 Calpine and Bechtel's application for  
7 certification for the Delta Energy Center.

8 This hearing is being conducted in the  
9 Pittsburg area for the convenience of local  
10 intervenors and residents interested in this  
11 proceeding.

12 Before we begin we're going to introduce  
13 the Committee and then ask the parties to identify  
14 themselves for the record. We will also ask the  
15 individual members of the public who are attending  
16 this hearing to identify themselves, even if you  
17 are not affiliated with an intervenor or  
18 organization.

19 I am Bill Keese, Chairman of the  
20 Commission, and lead on this case. Commissioner  
21 Robert Pernell is to my right, and the Second  
22 Member of this Committee.

23 We also have my Advisor, Cynthia Praul.  
24 Our Hearing Officer Susan Gefter, and Major  
25 Williams, who will conduct the evidentiary portion

1 of this hearing.

2 I'd like at this time to ask Mr. Harris  
3 to introduce the representatives of the applicant.

4 MR. HARRIS: My name is Jeff Harris.  
5 I'm with the lawfirm of Ellison and Schneider, and  
6 I would ask that the rest of our team introduce  
7 themselves.

8 MS. STRACHAN: I'm Susan Strachan. I'm  
9 the Environmental Project Manager.

10 MR. ELLISON: Chris Ellison, Ellison and  
11 Schneider.

12 MR. LOWE: John Lowe, CH2M Hill.

13 MR. RUBENSTEIN: Gary Rubenstein with  
14 Sierra Research.

15 MR. CRISP: I'm Wynnlee Crisp, CH2M  
16 Hill.

17 PRESIDING MEMBER KEESE: Thank you. Mr.  
18 Richins, would you like to introduce staff.

19 MR. RICHINS: Yes. My name is Paul  
20 Richins, Project Manager for the Energy  
21 Commission.

22 MR. RATLIFF: I'm Dick Ratliff, counsel  
23 to staff.

24 PRESIDING MEMBER KEESE: The  
25 intervenors. CURE?

1 MS. POOLE: Kate Poole for CURE.

2 PRESIDING MEMBER KEESE: CAP-IT.

3 Paulette will probably be here later.

4 The City of Antioch.

5 MR. HALL: Jack Hall, City of Antioch.

6 PRESIDING MEMBER KEESE: Thank you.

7 City of Pittsburg.

8 Southern Energy.

9 Community Health First.

10 MR. HAWKINS: Joe Hawkins of Community

11 Health First.

12 PRESIDING MEMBER KEESE: And

13 Californians for Renewable Energy.

14 MR. BOYD: Mike Boyd for Californians

15 for Renewable Energy.

16 PRESIDING MEMBER KEESE: Thank you. As

17 far as agencies are concerned, the Bay Area Air

18 Quality Management District.

19 Delta Diablo Waste --

20 MR. JANG: Dennis Jang, Bay Area Air

21 Quality.

22 PRESIDING MEMBER KEESE: Dennis Jang.

23 We need you at the microphone, Dennis, for the

24 recorder, please.

25 MR. JANG: Dennis Jang, Bay Area Air

1       Quality.

2                   PRESIDING MEMBER KEESE:  Thank you.  And  
3       then from the Delta Diablo Wastewater Facility.

4                   We have also with us our Public Adviser,  
5       Roberta Mendonca.

6                   MS. MENDONCA:  Yes, Roberta Mendonca,  
7       California Energy Commission Public Advisor.

8                   PRESIDING MEMBER KEESE:  At this time  
9       I'm going to ask members of the public who'd care  
10      to introduce themselves to do so.

11                   And also, we have an extended agenda  
12      this evening.  I'm going to ask that if there is  
13      anybody who has a time constraint, feels they have  
14      a time constraint, let us know when you identify  
15      yourself, and we'll see how we can handle that in  
16      our hearing process.

17                   Is there any member of the public who  
18      would like to introduce themselves at this time?  
19      This does not prohibit you from testifying later.  
20      Thank you.

21                   Paulette, would you like to introduce  
22      yourself formally, at the microphone, please.

23                   MS. LAGANA:  Yes.

24                   PRESIDING MEMBER KEESE:  Representing  
25      CAP-IT.

1 MS. LAGANA: Right. Paulette Lagana,  
2 representing CAP-IT. We're an environmental  
3 education group and we're an intervenor in the  
4 process. Thank you.

5 PRESIDING MEMBER KEESE: Thank you. On  
6 October 26, 1999, the Committee issued a second  
7 revised evidentiary hearing schedule which  
8 scheduled tonight's hearing on air quality, public  
9 health and socioeconomics, including environmental  
10 justice.

11 The final determination of compliance  
12 from the Bay Area Air Quality Management District  
13 was docketed on October 25th. Staff and applicant  
14 submitted supplemental testimony on air quality,  
15 public health and socioeconomics on November 8th.

16 Staff also conducted a public workshop  
17 on the FDOC in Pittsburg on November 8th. The  
18 intervenors filed testimony on air quality, public  
19 health and socioeconomics on November 12th.

20 The Public Advisor also sent  
21 notification about the November 8th workshop and  
22 this hearing to many residents in the Pittsburg  
23 area. At this point we request Ms. Mendonca to  
24 summarize her efforts in this regard.

25 Roberta, we'd like you to summarize your

1        efforts in notifying the public of the November  
2        8th workshop and this hearing.

3                MS. MENDONCA:    Okay, I came prepared to  
4        talk about what I've been doing in the community  
5        since the Delta Project first arrived.    And  
6        actually my first experience with the Delta  
7        Project started back in February when they held a  
8        community open house.

9                I attended that open house, having  
10       received information and notice, and it was the  
11       beginning of 12 meetings that I've attended  
12       incident to the Delta process.

13               And once I came to town we had been here  
14       in the Pittsburgh area because of the previous  
15       project, but I repeated what I normally do, which  
16       is go into the community and post a one-page  
17       notice of upcoming meetings.    And the notice  
18       includes information about the project, as well as  
19       my phone number and 800 number and an email  
20       address.

21               Since the Delta case began the Public  
22       Advisor's workload has increased 40 percent.  
23       Nevertheless, I've totaled the amount of time that  
24       I've concentrated on Delta and found more than 120  
25       hours incident to public meetings, and more than

1       200 hours working with intervenors and members  
2       from the public.

3               PRESIDING MEMBER KEESE: Thank you. At  
4       this time we're going to proceed to presentations  
5       by the parties. I'm going to ask Ms. Gefter to  
6       conduct this portion of the hearing.

7               HEARING OFFICER GEFTER: At this point  
8       I'm going to describe the hearing process, and  
9       describe the rules by which we are going to  
10      conduct the hearing.

11              This evidentiary hearing is formal in  
12      nature. It's similar to a court proceeding. The  
13      purpose of the hearing is to receive evidence,  
14      including testimony, and to establish the factual  
15      record necessary to reach a decision in this case.

16              The applicant has the burden of  
17      presenting sufficient substantial evidence to  
18      support the findings and conclusions required for  
19      certification of the proposed facility.

20              The Commission Staff functions as an  
21      independent party that conducts independent  
22      analyses of the topics addressed in the  
23      application for certification.

24              The intervenors are parties who have the  
25      rights to present testimony and cross-examine

1 witnesses. The intervenors are also obligated to  
2 meet the scheduled deadlines established by the  
3 Committee, and to follow the rules of this  
4 proceeding.

5 The order of testimony this evening will  
6 be taken as follows for each topic: First the  
7 applicant, then staff, CURE, City of Antioch, City  
8 of Pittsburg, CAP-IT, Community Health First and  
9 Californians for Renewable Energy.

10 We will first hear testimony on the  
11 topic of air quality. At the conclusion of that  
12 testimony, we will hear testimony on public  
13 health. And finally on socioeconomics and  
14 environmental justice.

15 Witnesses will testify under oath or  
16 affirmation. During the hearing a party  
17 sponsoring a witness should establish the witness'  
18 qualifications, and then as the witness to  
19 summarize the prepared testimony. Relevant  
20 exhibits should be offered into evidence at that  
21 time.

22 At the conclusion of a witness' direct  
23 testimony the Committee will provide the other  
24 parties an opportunity for cross-examination,  
25 followed by redirect and recross-examination, if



1       appropriate.

2               Multiple witnesses may testify as a  
3       panel. The Committee may also question the  
4       witnesses.

5               We expect that the parties this evening  
6       will provide extensive testimony and cross-  
7       examination. Since these presentations will cover  
8       some very complex and perhaps controversial  
9       matters, this hearing will be quite formal to  
10      allow each party sufficient time to present  
11      testimony.

12              These formalities include the following:  
13      If any party has an objection to questions of its  
14      witness, please direct your objection to me. We  
15      will go off the record if any party attempts to  
16      argue, either with another party or with the  
17      witness. We ask that you reserve your arguments  
18      for your briefs.

19              We will allow some leniency for the  
20      intervenors who are not represented by counsel.  
21      However, we remind the intervenors that you must  
22      ask questions of the witnesses. You may not argue  
23      with the witnesses.

24              We remind the parties that the  
25      intervenors may present lay opinion that is not

1 supported by expert testimony. The parties may  
2 challenge those lay opinions by cross-examination  
3 and in their briefs.

4 The parties may request a recess at  
5 anytime to ask the Committee for clarification of  
6 the process.

7 Upon conclusion of each topic area we  
8 will invite members of the public to offer unsworn  
9 public comment. Public comment is not testimony.  
10 But it may be used to explain evidence in the  
11 record.

12 At this point I will ask if there are  
13 any questions from any party as to the process  
14 this evening? Is there any question from members  
15 of the public as to the process? Yes, go ahead,  
16 please. Identify yourself for the record.

17 MR. HAWKINS: My name's Joe Hawkins,  
18 Community Health First.

19 You brought out that if there was a time  
20 constraint that we could bring that up. Because  
21 my attention span is only good for about two to  
22 three hours, and then I start fading fast. And I  
23 was going to bring that up.

24 HEARING OFFICER GEFTER: You will have  
25 the opportunity to bring that up when it gets to

1 be that time.

2 Is there any other question?

3 The Committee has distributed a current  
4 version of the exhibit list to the parties. And I  
5 think everyone now has a copy of the exhibit list.

6 At this point I'd like to ask the  
7 parties if they have any additional exhibits that  
8 they wish to identify and/or move into evidence.  
9 Mr. Harris.

10 MR. HARRIS: We have one additional  
11 item, the variance granted by the City of  
12 Pittsburg. And I'll let Doug Buchanan give you a  
13 brief overview of that, if it's appropriate now.

14 HEARING OFFICER GEFTER: Do you want to  
15 do this now? Is this a resolution from the City  
16 of Pittsburg?

17 MR. HARRIS: It is.

18 HEARING OFFICER GEFTER: Okay, and this  
19 goes to the topic of land use?

20 MR. HARRIS: Right, it's, I think, the  
21 last item we needed to close out the record on  
22 land use.

23 HEARING OFFICER GEFTER: Okay, and this  
24 would be exhibit 72 at this point.

25 MR. HARRIS: Okay.

1 HEARING OFFICER GEFTER: Do you have a  
2 copy of that resolution?

3 MR. HARRIS: We do.

4 HEARING OFFICER GEFTER: Thank you.  
5 Would applicant please describe this document to  
6 us?

7 MR. HARRIS: Again, I'd ask Doug  
8 Buchanan to give a brief summary.

9 MR. BUCHANAN: My name is Doug Buchanan.  
10 I'm the Development Manager for the Delta Energy  
11 Center Project.

12 HEARING OFFICER GEFTER: And Mr.  
13 Buchanan is under oath from previous hearings.

14 MR. BUCHANAN: That is correct.  
15 Whereupon,

16 DOUGLAS BUCHANAN  
17 was recalled as a witness herein and having been  
18 previously duly sworn, was examined and testified  
19 as follows:

20 MR. BUCHANAN: Speaking to the topic of  
21 land use, the remaining land use item for the  
22 record was a resolution of conformity with the  
23 City of Pittsburgh regarding the stack height and  
24 transmission tower height variance.

25 At the Council meeting of last Monday,

1 November 15th, the City of Pittsburgh did pass a  
2 resolution of conformity for the height variance.  
3 And we'll submit that into evidence as exhibit 72,  
4 correct, exhibit 72.

5 And with that, we believe that that  
6 concludes and closes all remaining land use  
7 issues.

8 HEARING OFFICER GEFTER: Is there any  
9 objection from staff to the admission of this  
10 document into evidence?

11 MR. RATLIFF: No.

12 HEARING OFFICER GEFTER: Is there any  
13 objection from any of the other parties?

14 Hearing no objection, exhibit 72 is  
15 received into evidence and the topic of land use  
16 is closed.

17 MR. HAWKINS: I would like to object.  
18 The reason I'm objecting is because was there an  
19 environmental impact study done on the -- by the  
20 City of Pittsburgh with regards to the height of  
21 the stack?

22 HEARING OFFICER GEFTER: Okay, I'll ask  
23 the applicant to respond to that.

24 MR. BUCHANAN: Again, Doug Buchanan.  
25 I'll respond, but we do have a representative from

1 the City of Pittsburgh here from the planning  
2 department that can speak further to that topic.

3 The process within the City of Pittsburgh  
4 is a planning commission review of city  
5 ordinances. And they do an initial recommendation  
6 to the city council regarding conformity or lack  
7 of conformity.

8 At the planning commission meeting  
9 November 8th, I believe, the planning commission  
10 reviewed and ruled that it was appropriate to  
11 grant the variance, and forwarded it to the city  
12 council for confirmation and subsequent  
13 resolution, which we've just spoken to.

14 To answer Mr. Hawkins' question  
15 directly, the city does not require an  
16 environmental impact report to rule in regards to  
17 its own ordinances.

18 HEARING OFFICER GEFTER: Thank you.  
19 That is accurate, and the Committee takes  
20 administrative notice that no EIR is required for  
21 the city to grant a variance. And, in fact, the  
22 California Energy Commission is conducting the  
23 environmental review of this project as part of  
24 this AFC process.

25 Mr. Boyd.

1                   MR. BOYD: My only question is was the  
2 public somehow notified that the variance -- that  
3 there's a variance going to be issued by the city  
4 prior to it being issued? Or is there any  
5 opportunity for public input on that variance?

6                   HEARING OFFICER GEFTER: I believe the  
7 city council meeting was noticed at which this was  
8 discussed.

9                   MR. RATLIFF: Just to clarify, the City  
10 of Pittsburg is not issuing a variance. The  
11 Energy Commission is going to make a finding. And  
12 the finding that it makes, if it does, is whether  
13 or not the project is in conformity with existing  
14 ordinances, zoning ordinances and general plan  
15 requirements.

16                   And the Energy Commission asked the  
17 counsel for the City of Pittsburg, the legal  
18 counsel, if they could provide -- if the city  
19 counsel could provide an advisory opinion as to  
20 whether or not the project in its current form  
21 would be in conformity with height ordinances,  
22 such that they would provide a variance, were they  
23 the permitting agency.

24                   They are not, because we are. But were  
25 they the permitting agency, would they consider it

1 to be in conformity.

2 And this was the opinion. They had to  
3 meet formally to issue that opinion. But no  
4 permit issues as a result of that opinion, because  
5 they cannot issue the permit, themselves.

6 MR. BOYD: Mike Boyd again. So what  
7 basically you're saying is that it's an  
8 administrative decision?

9 MR. RATLIFF: It was an advisory opinion  
10 to the Energy Commission concerning the  
11 application of their own ordinances.

12 MR. BOYD: But, someone else --

13 HEARING OFFICER GEFTER: Excuse me, Mr.  
14 Boyd, --

15 MR. BOYD: Excuse me.

16 HEARING OFFICER GEFTER: -- ask the  
17 question to the Committee.

18 MR. BOYD: Okay. The witness -- or he's  
19 not a witness, yet, I guess. He said that the  
20 city considered it on the city council agenda,  
21 correct?

22 MR. RATLIFF: Yes.

23 MR. BOYD: So the answer to my question  
24 is yes, the public was given an opportunity --

25 MR. RATLIFF: Presumably the --



1 MR. BOYD: -- in their city agenda --

2 MR. RATLIFF: -- the city would have  
3 complied with the Open Meetings Act and --

4 MR. BOYD: Right.

5 MR. RATLIFF: -- put this in a public  
6 notice -- in the public notice of their agenda  
7 meeting. So it would be noticed, yes.

8 MR. BOYD: Okay.

9 MR. BUCHANAN: There were actually four  
10 separate events. There were two workshops, one at  
11 the planning commission, one at the city council.  
12 Both of which were part of the agenda process.  
13 They were not formally agendized per Brown Act  
14 rules.

15 Two subsequent meetings, the planning  
16 commission resolution and the city council  
17 resolution all were properly noticed in the  
18 community.

19 So the answer is a resounding yes.

20 HEARING OFFICER GEFTER: Okay, thank  
21 you, we're going to move on now. The Committee is  
22 going to accept the resolution from the City of  
23 Pittsburgh, identified as exhibit 72, into  
24 evidence. And the topic of land use is now  
25 closed.

1                   If the intervenors have any further  
2                   questions about this process you can discuss it  
3                   with our staff after the hearing.

4                   We're going to move on now. Are there  
5                   any other exhibits that the applicant would like  
6                   to move into evidence or introduce at this time?

7                   MR. HARRIS: No new exhibits, but we  
8                   have a couple other housekeeping items when it's  
9                   appropriate.

10                  HEARING OFFICER GEFTER: Okay, would you  
11                  to go those.

12                  MR. HARRIS: Okay. Exhibits 40 and 41  
13                  are the testimony for soils and water, which were  
14                  filed on October 8th. Those were the subject of  
15                  the hearing, the last hearing. And they weren't  
16                  moved into evidence at the prior hearing, so I'd  
17                  like to move them into evidence at this time.  
18                  Exhibits 40 and 41.

19                  HEARING OFFICER GEFTER: Does staff have  
20                  any objection to moving those exhibits into  
21                  evidence?

22                  MR. RATLIFF: No.

23                  HEARING OFFICER GEFTER: Do any other  
24                  parties have objections to moving those exhibits  
25                  into evidence? That would be exhibits 40 and 41?

1 MR. HARRIS: Yes.

2 HEARING OFFICER GEFTER: Yes. Hearing  
3 no objection, exhibits 40 and 41 are moved into  
4 evidence. They refer to the topic of soils and  
5 water resources. That topic is now closed.

6 MR. HARRIS: Thank you. Exhibit 42, as  
7 well, is the biological opinion. That document  
8 was docketed on the 12th of November, and I would  
9 like to move that document into evidence, as well.

10 HEARING OFFICER GEFTER: Is there any  
11 objection to receiving the biological opinion,  
12 exhibit 42, into evidence at this time? Does  
13 staff have an objection?

14 MR. RATLIFF: No.

15 HEARING OFFICER GEFTER: Do any of the  
16 intervenors have an objection?

17 MR. HAWKINS: I don't even know which  
18 one it is.

19 HEARING OFFICER GEFTER: This is the  
20 biological opinion from the U.S. Fish and Wildlife  
21 Service that was discussed during the biology  
22 testimony when we last had a hearing on November  
23 3rd.

24 MR. HAWKINS: Yeah, I have an objection,  
25 because when I was there and I was questioning

1       them, they did not bring out the runoff that would  
2       be causing from the rain with the air -- concern  
3       in the air pollution.

4               HEARING OFFICER GEFTER:  Yes, you had  
5       the opportunity to cross-examine the witness at  
6       that time.  And received the witness' responses.  
7       And those responses are in the record.

8               At this point this is a document from  
9       the U.S. Fish and Wildlife Service --

10              MR. HAWKINS:  Right.  Even they said  
11       that they didn't do that.

12              MR. HARRIS:  The document was filed and  
13       served, Susan, so Mr. Hawkins has seen it.

14              HEARING OFFICER GEFTER:  Mr. Hawkins was  
15       mailed a copy of this document?

16              MR. HARRIS:  Yes, he was.  Thank you.

17              HEARING OFFICER GEFTER:  Yes.  Okay.  
18       Your objection is noted for the record, and  
19       overruled.  Exhibit 42 is admitted into the  
20       record.  The topic of biology is now closed.

21              Mr. Hawkins, you can have an opportunity  
22       to brief your concerns with respect to the biology  
23       issues that you raised, but we're moving on now.

24              Okay, are there any other exhibits?

25              MR. HARRIS:  No other exhibits, but I

1 wanted to discuss presentation of witnesses when  
2 that's appropriate.

3 HEARING OFFICER GEFTER: Yes.

4 MR. HARRIS: We're going to have one  
5 witness for air quality on direct; one for public  
6 health on direct; and two for socioeconomics on  
7 direct.

8 In terms of cross-examination I want to  
9 make my witnesses available as a panel. There's a  
10 lot of overlap between the public health and the  
11 air quality, in particular, and the socio.

12 And so while we only have one witness  
13 for the direct testimony, I want to have all of my  
14 experts available for the cross-examination.

15 And so in that connection I'd like to  
16 have all three of my witnesses sworn before we  
17 start into air quality so, if necessary, on cross-  
18 examination, they're available to answer.

19 HEARING OFFICER GEFTER: Is there any  
20 objection, staff?

21 MR. RATLIFF: No.

22 HEARING OFFICER GEFTER: Do the  
23 intervenors have objection? Mr. Boyd.

24 MR. BOYD: My question is you and me  
25 spoke a little bit yesterday about this, and when

1       you described the process to me basically you said  
2       that we had to confine our testimony and our  
3       examination of the witnesses to the item on the  
4       agenda which, in this case, was separated into  
5       three specific topic areas.

6               It seems now the applicant is proposing  
7       to combine that into one, and it's not clear to me  
8       how that's going to benefit facilitating the  
9       meeting and getting everything taken care of in a  
10      timely manner.

11             HEARING OFFICER GEFTER:   Okay, thank you  
12      for your question.   I understand your question.  
13      What the applicant is proposing to do is to put on  
14      the direct testimony of his air quality witness  
15      first.   And that person then will complete the  
16      direct testimony.

17             Then the other parties will have an  
18      opportunity to cross-examine the air quality  
19      witness.   If any questions that are asked of the  
20      air quality witness that that witness cannot  
21      respond to, then the other witnesses who may have  
22      an answer to that question will have the  
23      opportunity to respond.

24             MR. BOYD:   Okay, now if that's the case,  
25      then why shouldn't I have the same ability with my

1 witnesses to have all my witnesses serve as a  
2 panel, as well?

3 HEARING OFFICER GEFTER: You may do that  
4 on cross-examination.

5 MR. BOYD: Okay, thank you.

6 HEARING OFFICER GEFTER: Yes.

7 MR. HARRIS: Just for the record,  
8 there's no new testimony being offered in any of  
9 those subject areas. So the testimony for air  
10 quality is the air quality testimony you have.  
11 And the socio and the public health, same thing.  
12 It's all the same testimony.

13 I just want my witnesses, my experts  
14 available for cross.

15 MR. BOYD: Can I just state, actually I  
16 agree with the applicant in a number of the issues  
17 on the environmental justice. We're going to be  
18 talking about things like impact areas, and we're  
19 going to be looking at air impacts, specifically.  
20 So that sort of crosses between the two, and I  
21 think that's a good thing to allow to occur.

22 HEARING OFFICER GEFTER: You will be  
23 allowed to have a panel when the other parties are  
24 cross-examining your witnesses.

25 MR. BOYD: Okay, thank you.

1 HEARING OFFICER GEFTER: Ms. Lagana.

2 MS. LAGANA: Paulette Lagana, CAP-IT.

3 I have a question about exhibit 71.

4 HEARING OFFICER GEFTER: Exhibit 71 was  
5 a document that was submitted by Mr. Boyd.

6 MS. LAGANA: Oh, okay.

7 HEARING OFFICER GEFTER: And it is air  
8 quality studies that apparently you are familiar  
9 with?

10 MS. LAGANA: Okay, I was going to say  
11 because we didn't submit it, so I was just curious  
12 how it got there.

13 Thank you.

14 HEARING OFFICER GEFTER: Okay. You'll  
15 have the opportunity to discuss it when Mr. Boyd  
16 presents his testimony.

17 Staff.

18 MR. RATLIFF: If I could just ask, staff  
19 is also trying to figure out what the best way to  
20 present its testimony is. We've got two air  
21 quality witnesses, and we have the District, who  
22 we normally sponsor as a witness, as well. And we  
23 have one public health witness.

24 And I had thought of putting on the two  
25 air quality witnesses for staff first, followed by



1 the Air District, and then followed by public  
2 health.

3 But I wonder, I mean I'm essentially  
4 asking the intervenors, is it better to have it  
5 broken? Or is it better to have it together? The  
6 public health from the air?

7 HEARING OFFICER GEFTER: No, we're not  
8 going to do that, Mr. Ratliff. What we're going  
9 to do is first we're going to do air quality. And  
10 you can --

11 MR. RATLIFF: You want to keep that  
12 entirely separate?

13 HEARING OFFICER GEFTER: Yes.

14 MR. RATLIFF: For the purposes of the  
15 record, then?

16 HEARING OFFICER GEFTER: Right.

17 MR. RATLIFF: Okay, I understand.

18 HEARING OFFICER GEFTER: And so you will  
19 have the opportunity to present your two staff  
20 witnesses, and then the testimony of the  
21 representative BAAQMD.

22 And then the other parties will have the  
23 opportunity to cross-examine all three witnesses  
24 as a panel if a question comes up that overlaps  
25 air and public health, and your public health

1 witness can answer that question, rather than your  
2 air quality witnesses, then you can propose a  
3 panel.

4 MR. RATLIFF: Okay.

5 HEARING OFFICER GEFTER: But it would  
6 only be at the point where your witnesses are in  
7 cross-examination.

8 We're going to go with air quality first  
9 and we're going to ask the applicant to begin your  
10 presentation.

11 MR. HARRIS: Thank you. Should I have  
12 my three witnesses sworn?

13 HEARING OFFICER GEFTER: You may do  
14 that. Identify them and indicate their expertise  
15 and you may do that.

16 MR. HARRIS: Yes. Actually I'll have  
17 them introduce themselves, and then say which  
18 areas they're going to be testifying on, then they  
19 can stand up again.

20 MR. RUBENSTEIN: Gary Rubenstein with  
21 Sierra Research.

22 MR. LOWE: John Lowe with CH2M Hill.

23 MR. CRISP: Wynnlee Crisp with CH2M  
24 Hill.

25 HEARING OFFICER GEFTER: And your main

1 witness for air quality is?

2 MR. HARRIS: Mr. Rubenstein will be  
3 doing air quality. John Lowe will be doing public  
4 health. And then Mr. Crisp will be doing  
5 socioeconomics.

6 In addition on the socioeconomics, Doug  
7 Buchanan will sponsor the testimony of John  
8 Carrier, but Doug has already been sworn.

9 HEARING OFFICER GEFTER: Okay, thank  
10 you. Would the court reporter please swear the  
11 three witnesses for applicant.  
12 Whereupon,

13 GARY RUBENSTEIN, JOHN LOWE and WYNNLEE CRISP  
14 were called as witnesses herein and after first  
15 being duly sworn, were examined and testified as  
16 follows:

17 HEARING OFFICER GEFTER: Thank you. You  
18 may begin direct testimony on air quality.

19 DIRECT EXAMINATION

20 BY MR. HARRIS:

21 Q Gary, could you please again state your  
22 name for the record?

23 A My name is Gary Rubenstein,  
24 R-u-b-e-n-s-t-e-i-n.

25 Q And which subject matter are you here to

1 sponsor tonight?

2 A I'm sponsoring testimony on air quality  
3 and the analyses related to air quality that  
4 support the work in public health and  
5 socioeconomics.

6 Q And could you briefly summarize your  
7 qualifications for the Committee?

8 A I'm a senior partner in the firm of  
9 Sierra Research, which is an air quality  
10 consulting firm based in Sacramento. I have a  
11 bachelor of science degree in engineering from the  
12 California Institute of Technology or CalTech.

13 I cofounded Sierra Research in 1981  
14 after serving as the Deputy Executive Officer at  
15 the California Air Resources Board.

16 While at the Air Resources Board I  
17 supervised the work of more than 300 engineers and  
18 scientists in the field of air pollution, research  
19 and control, program development and enforcement  
20 regarding a wide range of air pollution  
21 regulations.

22 Since cofounding Sierra Research I've  
23 had the principal responsibility for the firm's  
24 activities in the field of stationary source or  
25 industrial air pollution sources.

1                   These activities include preparation of  
2                   permit applications for new facilities; evaluation  
3                   of the effect of proposed regulations on existing  
4                   or new sources of air pollution; assessments of  
5                   compliance by existing sources of pollution with  
6                   federal, state and local requirements.

7                   I've had extensive experience in regard  
8                   to advising clients regarding interpretations in  
9                   compliance with environmental regulations and air  
10                  pollution regulations in particular, including  
11                  regulations in the Bay Area Air Quality Management  
12                  District.

13                  I've served as an expert witness in  
14                  proceedings on behalf of the Alaskan Department of  
15                  Law and the California Attorney General's Office,  
16                  as well as participated in more than 15 siting  
17                  cases before the Energy Commission over the last  
18                  20 years.

19                  HEARING OFFICER GEFTER: We're going off  
20                  the record.

21                  (Off the record.)

22                  HEARING OFFICER GEFTER: Before we  
23                  continue with Mr. Rubenstein's testimony two  
24                  representatives of the City of Pittsburg are  
25                  present. I'd like them to introduce themselves

1           for the record.

2                   MR. JEROME:   Randy Jerome, City of  
3           Pittsburg.

4                   MR. DUNBAR:   Jerry Dunbar, City of  
5           Pittsburg.

6                   HEARING OFFICER GEFTER:   Thank you.

7                   MR. GANGAPURAM:   Avan Gangapuram, City  
8           of Pittsburg.

9                   HEARING OFFICER GEFTER:   Thank you.   You  
10          may proceed with the testimony.

11                   MR. HARRIS:   Thank you.

12          BY MR. HARRIS:

13                 Q       We'll go back to the documents at issue  
14          here.   Gary, specifically which documents are you  
15          sponsoring as a portion of your testimony?

16                 A       I will be sponsoring exhibit 43, exhibit  
17          44, exhibit 45 and exhibit 46, exhibit 48 and  
18          exhibit 49.

19                   The specific documents that are covered  
20          by those exhibits are listed in my testimony.

21                 Q       And exhibit 47, as well, Gary?

22                 A       I'm sorry, yes, exhibit 47, as well.

23                 Q       Okay.   Now, were these documents either  
24          prepared by you, reviewed by you, or prepared at  
25          your direction?

1           A     Yes, that is correct.

2           Q     And do you have any changes or  
3     corrections to those documents at this time?

4           A     No. I have one change to my written  
5     testimony, or two changes, to make them conform to  
6     that exhibit list.

7                     At the bottom of page 3 of my testimony  
8     is reference to a letter dated September 22nd from  
9     Sierra Research to the Bay Area Air Quality  
10    Management District. That reference should be to  
11    letters, plural, dated September 22nd and  
12    September 24, 1999.

13                    And on page 4 of my testimony at the  
14    very top of the page should be one additional  
15    bullet referencing a letter dated October 21,  
16    1999, from Sierra Research to Paul Richins of the  
17    California Energy Commission regarding particulate  
18    mitigation measures.

19                    Those two additional documents are  
20    already in the exhibit list I just referenced.

21           Q     Now, with those changes, Gary, are the  
22    facts true to the best of your knowledge?

23           A     Yes, they are.

24           Q     And do you adopt this as your testimony  
25    for this proceeding?

1           A     Yes, I do.

2           Q     With that out of the way now, I would  
3 ask you, Gary, if you would provide a summary of  
4 your testimony for the Committee, please.

5           A     In the course of this proceeding we were  
6 asked to evaluate the air quality impacts  
7 associated with the Delta Energy Center, and to  
8 assist in its design to insure that the project  
9 complies with all applicable air quality  
10 regulations, and does not present or result in any  
11 significant air quality or public health impacts.

12                     We had to do that on both two bases. We  
13 had to do that taking a look at local effects and  
14 at regional effects, because when it comes to air  
15 pollution those can be very different issues.

16                     With respect to local air quality  
17 effects we addressed those issues with three  
18 different types of analyses. First is an analysis  
19 of what pollution control technology should be  
20 required for the project.

21                     Second is an air quality impact analysis  
22 specifically looking at local impacts. And third  
23 is preparation of a health risk assessment that  
24 Mr. Lowe will discuss in more detail, but we did  
25 the underlying work to support that.



1                   With respect to best available control  
2           technology the Bay Area Air Quality Management  
3           District's final determination of compliance, we  
4           believe, does require that this project use the  
5           best available pollution control technology.

6                   With respect to hydrocarbon emissions, a  
7           precursor to smog, photochemical smog or ozone,  
8           the requirements for this plant are so stringent  
9           that on a typical summer day the hydrocarbon  
10          concentrations in the stack will be lower than the  
11          concentrations of hydrocarbons present in the  
12          ambient air surrounding the stack.

13                  With respect to carbon monoxide, the  
14          requirements in the permit are so stringent that  
15          the carbon monoxide levels in the stack will be at  
16          or below the ambient air quality standard for  
17          carbon monoxide, that is the level that's safe to  
18          breathe. And those are the concentrations inside  
19          the stack.

20                  Oxides of nitrogen emissions will be  
21          controlled through a combination of two  
22          technologies. One is the use of dry low NOx  
23          combustors. And the second is a system called  
24          selective catalytic reduction that this Commission  
25          has reviewed many times before.

1                   The combination of those two  
2           technologies will result in NOx levels that are at  
3           or below 2.5 ppm, a level that has been  
4           established and accepted by the Bay Area Air  
5           Quality Management District, the California Air  
6           Resources Board, the U.S. Environmental Protection  
7           Agency and this Commission in past proceedings, as  
8           representing best available control technology for  
9           NOx.

10                   Emissions of sulfur dioxide and  
11           particulate are controlled through the use of  
12           natural gas as a fuel.

13                   Consequently, we believe that the  
14           project will use the best available control  
15           technology to absolutely minimize emissions from  
16           the plant.

17                   The second part of our analysis, with  
18           respect to local air quality impacts, was  
19           preparation of an air quality impact analysis,  
20           often referred to as a modeling analysis.

21                   This analysis uses dispersion models  
22           required that be used by the U.S. Environmental  
23           Protection Agency and the Bay Area Air Quality  
24           District, and the number of worst case  
25           assumptions.

1                   Our analysis is based on the assumption  
2                   of worst case operating scenarios for the plant.  
3                   We superimpose on that assumption the assumption  
4                   of worst case emissions, the maximum allowable  
5                   emissions from the plant. And we superimpose on  
6                   top of that worst case weather conditions based on  
7                   four years of weather data that were collected at  
8                   the old PG&E facility in Pittsburgh approximately  
9                   two miles from the project site.

10                  So we have worst case operating  
11                  assumptions, worst case emission factors, and  
12                  worst case weather conditions, even if those  
13                  physically can't occur at the same time. We have  
14                  to be that conservative.

15                  We combine those conservative  
16                  assumptions in the modeling analysis and we have  
17                  to demonstrate that our project is not going to  
18                  cause any violations of any state or federal air  
19                  quality standards at any location under those  
20                  worst case conditions. And we believe the  
21                  analysis that we have done makes that showing.

22                  The third element that we have to look  
23                  at in terms of local air quality has to do with  
24                  the screening level health risk assessment. And,  
25                  again, Mr. Lowe will be discussing that when he

1 gives the testimony on public health.

2 Our role in preparing that analysis was  
3 to develop the estimates of emissions of toxic air  
4 pollutants from the plant, make the same very  
5 conservative assumptions that we made regarding  
6 facility operations emissions factors and weather  
7 conditions. And to prepare an analysis that shows  
8 what the worst case health risk would be and the  
9 location where that would occur.

10 And as Mr. Lowe, I believe, will  
11 testify, that analysis which was done in  
12 accordance with guidelines established the  
13 California Air Pollution Control Officers  
14 Association shows that the health risk is not  
15 significant at any location at any time.

16 That covers the portions of our analysis  
17 that dealt with local air quality impacts. As I  
18 said, we also have to address regional air quality  
19 impacts. And here again there are three  
20 components to our analysis.

21 First is a regional look at the air  
22 quality impact analysis. Second is a review of  
23 the emissions offset requirements in providing  
24 emissions offsets, as required by the Bay Area  
25 District regulations. And third is the provision

1 of additional mitigation that addresses any  
2 concerns the community or the Commission may have  
3 under CEQA.

4 With respect to the air quality impact  
5 analysis, when looking at it on a regional level,  
6 we have to look at cumulative impacts. And that  
7 cumulative impacts analysis was done in three  
8 parts.

9 In the application for certification we  
10 included the analysis that looked at the worst  
11 case impacts from our plant, in addition to  
12 existing background levels of pollutants from all  
13 other sources in the area.

14 The background levels of pollutants were  
15 taken from data collected by the Bay Area Air  
16 Quality Management District at Pittsburg for all  
17 pollutants except for particulate matter, which at  
18 the time we prepared the application was not being  
19 measured in Pittsburg.

20 Particulate matter measurements were  
21 taken from Bethel Island, and the decision to use  
22 Bethel Island instead of Concord was based on our  
23 review of the data and on a review of our proposal  
24 by Bay Area Air Quality Management District.

25 The Bay Area Air Quality Management

1 District, the Air Resources Board and the U.S. EPA  
2 have all agreed that Bethel Island is most  
3 representative of the available data sites for  
4 PM10 for this project.

5 In looking at that cumulative impacts  
6 analysis, again what we did is we took our very  
7 conservative worst case concentrations of  
8 pollutants from our project, added that to the  
9 existing background levels and demonstrated that  
10 our project would not cause any violations in the  
11 air quality standards.

12 It did show, not surprisingly, that we  
13 would contribute to existing violations of the  
14 state ozone standard, and the state particular  
15 matter or PM10 standard that occurs here from time  
16 to time.

17 Because of our contribution to that  
18 existing problem the regional air quality program  
19 requires that we provide emissions offsets.  
20 Emissions offsets are reductions in emissions that  
21 have already occurred and which have to be in an  
22 amount at least as great, if not greater, than the  
23 increase in emissions that our project will  
24 produce.

25 Those offsets are required under a

1 regulatory program that was established in  
2 California in the last 1970s to replace a program  
3 that previously had simply been based on  
4 dispersion modeling and was shown simply not to  
5 work.

6 The emissions offset program was a  
7 program intended to insure that improvements in  
8 air quality can be achieved without completely  
9 shutting down industrial growth. It's a program  
10 that's intended to mesh economic growth with air  
11 quality objectives. And I think the air quality  
12 data trends for the last 20 years throughout  
13 California show that the program has been working.

14 The third element of the regional  
15 analysis looks at potential gaps in the regulatory  
16 program. The Bay Area Air Quality Management  
17 District's regulations don't regulate all sources.  
18 For example, they don't regulate mobile sources.  
19 And in particular, in the case of this project,  
20 the Bay Area Air Quality Management District's  
21 program does not require emissions offsets for  
22 cooling towers for reasons that go back some 30  
23 years.

24 Because of concerns that were raised by  
25 the Commission Staff, we proposed to supply

1 additional mitigation in the form of additional  
2 emission reductions from existing sources to  
3 mitigate those impacts, as well.

4 And then finally with respect to  
5 mitigation we have proposed to participate in and  
6 fund an ambient air quality monitoring program  
7 that supplements the monitoring already performed  
8 in this area by the Bay Area Air Quality  
9 Management District.

10 Our contribution is to fund the location  
11 of a new site that's located just east of here,  
12 and began operation I believe in mid September,  
13 and is measuring both particulate matter on a 10  
14 micron basis, and also measures data focused on  
15 the new federal air quality standard that's  
16 referred to as PM2.5 for even smaller particles.

17 In addition we're committed to fund the  
18 upgrade of the Bay Area District's Pittsburg  
19 monitoring station so that measurements of toxic  
20 air contaminants will be collected at that station  
21 in addition to the data that are already collected  
22 at Bethel Island by the Bay Area District.

23 And finally, we have committed to do  
24 this monitoring during the period that precedes  
25 construction of the project and continuing for one



1 year following construction of the project, the  
2 operation of the project, and to provide reports  
3 to the community approximately every six months as  
4 the data become available both from the station  
5 that we're operating and the station that the Bay  
6 Area Air Quality Management District operates.

7 Based on all of these analyses,  
8 compliance with all of the applicable regulations  
9 and the additional mitigation that we have  
10 proposed for the project, it's my opinion that the  
11 project does comply with all of the applicable air  
12 quality regulations, and with mitigation, does not  
13 result in any significant air quality impact.

14 That concludes my direct testimony.

15 Q I have a couple more questions for you,  
16 Gary. I want to turn to the intervenors'  
17 testimony and ask you a couple questions on direct  
18 here.

19 Have you had a chance to review the  
20 testimony submitted by Joe Hawkins?

21 A Yes, I have.

22 Q And my question is, having reviewed that  
23 testimony, does that testimony in any way affect  
24 the conclusions that you've drawn?

25 A No, it does not.

1           Q     A similar question. Have you had an  
2           opportunity to review the testimony of intervenor  
3           Michael Boyd?

4           A     Yes, I have.

5           Q     Specific question with Michael Boyd's  
6           testimony. In his 11/18 testimony Mr. Boyd  
7           states, quote, "current EPA policy does not  
8           encourage the use of ERCs." End quote.

9                     What's your opinion as to whether that's  
10          a correct statement?

11          A     Absolutely not. Current EPA policy  
12          requires the USE of emission reduction credits for  
13          projects of this type.

14          Q     Thank you. Now, having had a chance to  
15          review Mr. Boyd's testimony, let me ask you, does  
16          that testimony in any way affect your conclusions?

17          A     No, it does not.

18                     MR. HARRIS: At this point, Susan, would  
19          you like us to move our documents into evidence at  
20          this point?

21                     HEARING OFFICER GEFTER: We can go to  
22          cross-examination, and at the conclusion of cross-  
23          examination you may offer to move your documents.

24                     Does staff have cross-examination of the  
25          witness?

1 MR. RATLIFF: Yes.

2 CROSS-EXAMINATION

3 BY MR. RATLIFF:

4 Q Mr. Rubenstein, are you familiar with  
5 Bay Area District rule 9-11?

6 A Yes, I am.

7 Q What is the origin of this rule, when  
8 did it take effect?

9 A That rule was first adopted in February  
10 of 1994.

11 Q Can you describe what its intent was and  
12 how it is being implemented?

13 A The purpose of that rule, and it's part  
14 of the family of rules that have been adopted in  
15 California since the early 1980s, is to control  
16 the emissions of oxides of nitrogen from utility  
17 scale boilers.

18 There are comparable rules that have  
19 been adopted in every air district in California  
20 where there are utility power plants. And  
21 regulation 9, rule 11 is the Bay Area Air Quality  
22 District's version of that.

23 It establishes a set of emission limits  
24 that are specific to the different types of  
25 utility scale boilers present in the San Francisco

1 Bay Area. It establishes a schedule by which  
2 emissions from those units must be controlled.  
3 And it provides for an alternative compliance  
4 mechanism under which the utility could specify  
5 which units achieve what level of control so long  
6 as the systemwide average reduction in emissions  
7 has occurred, is achieved, based on a schedule  
8 that's set forth in the rule.

9 And that systemwide reduction was to  
10 begin taking effect in 1997, and continues with  
11 gradual reductions in emissions from utility  
12 boilers through 2005 and beyond.

13 HEARING OFFICER GEFTER: I'm going to  
14 interject here and ask if the intervenors have a  
15 copy of rule 9-11, or do you need a copy?

16 MR. HAWKINS: I need a copy.

17 HEARING OFFICER GEFTER: Does the  
18 applicant have a copy to at least show them? I  
19 don't think we have a Xerox machine available to  
20 us, but we'll get you a copy.

21 Okay, continue, please.

22 BY MR. RATLIFF:

23 Q Is rule 9-11 affected in any way by the  
24 divestiture of the PG&E plants?

25 A The rule, itself, is not directly

1       affected.  However, because of the way that the  
2       rule is written, it does not apply by its own  
3       terms to the divested plants.

4               As a consequence, and again this is not  
5       a situation that's unique to the Bay Area, the  
6       same situation was found in southern California,  
7       at a minimum under the divestiture of the power  
8       plants that were previously owned by San Diego Gas  
9       and Electric, as a part of the environmental  
10      review process conducted by the California Public  
11      Utility Commission, they required as mitigation  
12      under CEQA that emission control provisions  
13      comparable to what were present in regulation 9,  
14      rule 11, be placed in the air pollution permits  
15      for each of the PG&E divested power plants within  
16      the Bay Area District.

17             And so the permits for each of those  
18      plants were modified to have emission control  
19      requirements comparable to what's in reg 9, rule  
20      11.

21      BY MR. RATLIFF:

22             Q       So, is it your understanding that the  
23      impact of rule 9-11 is actually being felt by the  
24      southern plants including the Pittsburg and Contra  
25      Costa plants owned by Duke?

1           A     Including Pittsburg --

2           Q     Southern, I'm sorry.

3           A     Yes, including the Pittsburg and Contra  
4           Costa plants owned by Southern, yes, they are  
5           having to comply with the same substantive  
6           requirements as are present in reg 9 rule 11.

7           Q     Do you know if the District intends to  
8           modify that rule to apply it directly to the  
9           current successor in interest to PG&E?

10          A     Yes. The last discussion I had with  
11          someone at the District on that subject was a  
12          couple of months ago, but at that time they  
13          indicated it was their intention to amend that  
14          rule so that it would apply specifically to the  
15          plants now owned by The Southern Company.

16          Q     Do you know what the effect of the rule  
17          is supposed to be in terms of the total amount of  
18          reduction in NOx over the entire period, from its  
19          initiation, I believe, in 1995, to the year 2005?

20          A     I could better answer that question if I  
21          had the rule in front of me again, which I will in  
22          a moment.

23                   (Laughter.)

24           MR. RUBENSTEIN: I can say that it is a  
25          substantial reduction. My hesitation is I don't

1 know whether the reduction is 70 or 80 or 90  
2 percent. But it is a large reduction in oxides of  
3 nitrogen emissions from the generating units in  
4 the Bay Area.

5 BY MR. RATLIFF:

6 Q Since we don't have the rule before you,  
7 I'd like to ask you if we could shift to the area  
8 of attainment in offsets.

9 You mentioned earlier in your direct  
10 that the District is not in compliance with the  
11 federal ozone standard or the -- I'm sorry, the  
12 state ozone standard, and the state PM10 standard.

13 I assume that -- am I correct in  
14 assuming that the typical remedy, the typical  
15 mitigation for such noncompliance would be a  
16 requirement that offsets be provided for any  
17 projects as large as this one?

18 A Yes, the federal Clean Air Act  
19 amendments as long ago as 1977 required that  
20 states that have areas that exceed the national  
21 ambient air quality standards put into place  
22 program that require the use of emission offsets,  
23 to mitigate on a regional basis, the impacts of  
24 new development.

25 California implemented its program

1 requiring emission offsets to be used beginning in  
2 1979, and that program has continued to evolve  
3 since then.

4 The basic elements of the program are  
5 that first sources that result in increases in  
6 emissions above a certain level are required to  
7 provide emission offsets.

8 The second portion of the program is a  
9 program that establishes what can be used as  
10 emission offsets, and how they can be created.  
11 What their lifetime is, and how they can be used.

12 The second portion is often referred to  
13 as the emissions banking program. One of the  
14 principal objectives of both elements of this  
15 program is to make sure that it did not create  
16 incentives for people to keep operating older  
17 facilities longer.

18 In addition, there is an objective to  
19 make sure that one could not get offset credit for  
20 reductions that were going to be needed to achieve  
21 or maintain state or federal air quality  
22 standards.

23 Q Can we go back -- can I interject a  
24 question here at this point? You said that one of  
25 the goals of the program was to achieve the



1 emissions reductions earlier than might otherwise  
2 be realized if you did not have a banking system,  
3 is that correct?

4 A That's correct.

5 Q And why would that occur?

6 A That would occur if there was a program  
7 that gave certainty to a facility operator that if  
8 they shut their facility down and went through a  
9 prescribed licensing process that they would come  
10 away with a piece of paper that would have some  
11 value. And that piece of paper is an emission  
12 reduction credit certificate.

13 By creating value for either cleaning up  
14 a facility by adding pollution controls, or by  
15 shutting down a facility when it is time to do so  
16 economically, you create the incentive for people  
17 to shut down earlier or clean up earlier than they  
18 would otherwise have to, because they could then  
19 create value that they could sell at a later time.

20 In addition, you end up insuring that  
21 there is a market of credits that is available  
22 when people want to build new projects, so that  
23 you don't run into the situation where someone  
24 tries to build a project and there are no credits  
25 available, and then you have to make a choice as

1 to whether you would allow them to build or not.

2 By creating the market ahead of time and  
3 insuring that you get the reductions ahead of  
4 time, you further both clean air goals by getting  
5 the air cleaner sooner, and you don't interfere  
6 with any economic development goals by creating a  
7 mechanism by which development can continue to  
8 occur.

9 Q You had to buy offsets for this  
10 particular project?

11 A That's correct.

12 Q And when you purchased offsets under the  
13 District rules, where can you obtain them?

14 A Under the District's rules we were  
15 allowed to obtain our emission reduction credits  
16 from anywhere within the nine-county Bay Area Air  
17 Quality Management District air basin. And in  
18 addition, from adjoining air basins provided  
19 certain requirements are met.

20 So it's a fairly broad area under the  
21 District's rules.

22 Q Is there any underlying theory behind  
23 which you would be allowed to buy an offset that  
24 was, say, in the South Bay to mitigate an emission  
25 that was in the North Bay?

1           A     Yes, under the District's rules we would  
2     be allowed to do that.

3           Q     And what is the thinking that would  
4     rationalize that kind of a tradeoff?

5           A     The thinking there is that in the Bay  
6     Area offsets are, as a practical matter, required  
7     only for two pollutants and their precursors.  
8     That is ozone and PM10.

9                     The nature of both of those impacts in  
10    the Bay Area is that they are largely regional  
11    pollutants. They are formed from other compounds  
12    during photochemical processes in the air. And it  
13    takes a fair amount of time, hours, or sometimes  
14    days, for those reactions to occur.

15                    Consequently, the Bay Area District  
16    views the creation of emission offsets and the use  
17    of them as a regional air management strategy.  
18    And the assumption being that while there may not  
19    be a match-up of a buyer and a seller in a  
20    particular city at a particular time, that this  
21    program, over the long term, will result in  
22    cleaner air in all portions of the Bay Area.

23                    And the air quality data that I've  
24    reviewed suggests that not just due to this  
25    program, but to the overall efforts of the Bay

1 Area District, and the state Air Resources Board,  
2 we do see cleaner air throughout the Bay Area.

3 Q In your experience with the Energy  
4 Commission has it been more stringent than the Bay  
5 Area in terms of requiring offsets more locally?

6 A Yes, my experience in Energy Commission  
7 siting cases is that the Commission has under its  
8 view of its mandate under CEQA, taken a more  
9 stringent -- placed a more stringent set of  
10 requirements on project applicants, and has  
11 required that applicants look first for sources of  
12 offsets that are closer to the community where the  
13 project is proposed, even if the local air  
14 district regulations would allow them to come from  
15 a further distance away.

16 Q Did you purchase offsets in this  
17 particular case in an effort to try to find local  
18 offsets?

19 A I'm sorry, could you repeat that?

20 Q Did you attempt to find local offsets  
21 for the project in this case?

22 A Yes. From the very beginning our work  
23 on this project, we knew that the Commission and  
24 the community, both, would want us to take  
25 whatever steps were necessary to find as many of

1       our offsets within the local community.

2                   And, in fact, we have done that. The  
3       vast majority of the offsets that we have obtained  
4       are from within Contra Costa County or nearby  
5       areas.

6                   MR. RATLIFF: I have no further  
7       questions.

8                   HEARING OFFICER GEFTER: Going to ask  
9       the intervenors if you have questions. I'm going  
10      to start with CURE, is there any cross-  
11      examination?

12                  MS. POOLE: No questions.

13                  HEARING OFFICER GEFTER: Okay. City of  
14      Antioch?

15                  MR. HALL: No questions.

16                  HEARING OFFICER GEFTER: City of  
17      Pittsburg?

18                  MR. JEROME: No questions.

19                  HEARING OFFICER GEFTER: CAP-IT?

20                  MS. LAGANA: I have a question.  
21      Paulette Lagana with CAP-IT.

22                               CROSS-EXAMINATION

23      BY MS. LAGANA:

24                  Q     Mr. Rubenstein, I have some questions  
25      regarding the air monitoring station that this

1 project is sponsoring being installed in  
2 Pittsburg, well, actually Pittsburg/Antioch.

3 The station was originally installed on  
4 September 19th at a location in Antioch, 1201 West  
5 10th Street. And subsequently the Bay Area Air  
6 Quality Management deems it unacceptable for  
7 various environmental reasons, is that correct?

8 A I was not involved in that review, but  
9 that is my understanding, yes.

10 Q Okay. So the station is going to be  
11 removed to another location which Bay Area Air  
12 Quality has consented would be more appropriate to  
13 be in an environment that would not contaminate  
14 the results as the first location would have.

15 A Without judging what they said about the  
16 first location --

17 Q Correct.

18 A -- the answer is yes, the station will  
19 be moved to a new location where the Bay Area  
20 District has said that it would be suitably  
21 located.

22 Q Okay. When will that new site be in  
23 production? Do you have a guesstimate?

24 A No. I know that from a site visit I  
25 took there today, that site preparation work for

1 the relocation actually is going to begin  
2 tomorrow. I don't know exactly when the station  
3 will be, in fact, relocated. I could make some  
4 checks during a break and get that answer for you.

5 Q Okay. I would like to know if it's the  
6 month of November or December.

7 A I will find that out for you.

8 Q And for the Commission's -- the  
9 explanation, the reason I'm asking is because the  
10 station was supposed to be --

11 HEARING OFFICER GEFTER: Okay, excuse  
12 me. If you could -- if you could --

13 MS. LAGANA: Just ask questions?

14 HEARING OFFICER GEFTER: -- form that in  
15 a question.

16 MS. LAGANA: Sure.

17 HEARING OFFICER GEFTER: Yes. Ask the  
18 witness your questions.

19 BY MS. LAGANA:

20 Q Since the station, Mr. Rubenstein, was  
21 supposed to be in production one year prior to  
22 your production of the -- of your power plant,  
23 right, prior to the project going into production  
24 through construction, there was the -- the station  
25 was supposed to be up and running and taking

1 results. That was the requirement of the CEC, one  
2 year prior to production, two years after  
3 production.

4 HEARING OFFICER GEFTER: What is your  
5 question for the witness?

6 BY MS. LAGANA:

7 Q The question is, will that set the time  
8 back, so we're now going to be starting September  
9 19th, we would be starting in November or  
10 December? So those two months, since the  
11 evidence -- the data being accepted now, or taken  
12 now is not acceptable to the Bay Area Air Quality  
13 Management, will the clock now be set at November  
14 or December rather than September?

15 A I'm not sure. There are a couple things  
16 I don't understand. First, --

17 Q Okay, --

18 A -- is as I said, I don't know what the  
19 Bay Area District's determination was regarding  
20 the original site. So, I can't say whether it's  
21 because they thought the data were going to be  
22 inaccurate or not.

23 A Yes, they did, I read the letter.

24 HEARING OFFICER GEFTER: Excuse me, Ms.  
25 Lagana, it sounds like the witness doesn't have an



1       answer to your question, and --

2               MS. LAGANA:   Okay.

3               HEARING OFFICER GEFTER:   -- and you may  
4       ask that question from the Bay Area representative  
5       who is here this evening.

6               MS. LAGANA:   Okay.

7               HEARING OFFICER GEFTER:   Let's move on.

8       BY MS. LAGANA:

9               Q       During the public workshop that was here  
10       on the 8th, there was a discussion as to the  
11       results and when they would be submitted to the  
12       public, when they would be available.

13               And at that time you had spoken about  
14       the results coming forth every six months.   And  
15       there was a request that at least it match what  
16       the Air Board, the Air Resources Board produces  
17       results of their data, which is every three  
18       months.

19               So the question is would you be willing  
20       to have the data every three months, since that  
21       would mean if it's every six months there would  
22       only be two opportunities for the public and Bay  
23       Area Quality and other agencies to see the results  
24       of the data of that particular station, where if  
25       it was four times a year, it would give more data,

1 more information.

2 A I believe that what we -- I think I  
3 understand your question.

4 Q Thank you.

5 A What we indicated in my October 6th  
6 letter to CAP-IT was that we would provide a  
7 comparison analysis of the data from the new  
8 station in Antioch with the data collected at  
9 Pittsburg and Bethel Island every six months,  
10 within 90 days of the end of each six-month  
11 period.

12 HEARING OFFICER GEFTER: The letter  
13 you're referring to is exhibit 48.

14 MR. RUBENSTEIN: Thank you, Ms. Gefter.

15 We can't commit to providing that  
16 comparison report on a more frequent basis because  
17 I don't know that we can get data from the Bay  
18 Area District on a more frequent basis that has  
19 been quality control checked.

20 We are certainly willing to make data  
21 available to the community from the one station  
22 that we're operating on a 90-day basis.

23 BY MS. LAGANA:

24 Q You mean --

25 HEARING OFFICER GEFTER: Next question.

1 MS. LAGANA: Okay, thank you. That's my  
2 questions.

3 HEARING OFFICER GEFTER: Community  
4 Health First, do you have questions of the  
5 witness?

6 MR. HAWKINS: Yes.

7 HEARING OFFICER GEFTER: Okay.

8 //

9 //

10 CROSS-EXAMINATION

11 BY MR. HAWKINS:

12 Q Well, first off, you were telling us  
13 about your background. I was curious, while you  
14 were in the ARB did the ARB or you, with people  
15 underneath you, study xenobiotics?

16 A I'm an engineer, not a biologist. And  
17 not a health effects expert. No, I did not.

18 Q Okay. And so you studied the air,  
19 though, and the quality of the air and the  
20 chemicals that are in the air, right?

21 A Among other things, yes.

22 Q Okay, and so you have to know there are  
23 effects on humans and so forth, right, do you know  
24 that?

25 A There were other people at the Air

1 Resources Board who had expertise in that area. I  
2 did not.

3 Q Okay. Let's see, for certification you  
4 mentioned that the data was taken from Pittsburgh  
5 except at the time of application.

6 Now, which data are you referring to,  
7 the PM10, the ozone, the toxics like the VOCs?

8 A What I was referring to was the  
9 background data of what are called criteria  
10 pollutants. And the pollutants that were measured  
11 at Pittsburgh included ozone, carbon monoxide and  
12 oxides of nitrogen.

13 As I mentioned at the time that we  
14 prepared the application, PM10 or particulate  
15 levels, were not measured at Pittsburgh. And  
16 consequently we took those data from Bethel  
17 Island.

18 Q Okay. When they did the nitrogen oxide,  
19 do you have any knowledge of how they had the  
20 tests calibrated, whether for SO2 or NOx, or do  
21 you know this?

22 A Did you mean to say SO2? That's sulfur  
23 dioxide.

24 Q Yeah.

25 A I'm certain that the oxides of nitrogen

1 monitor did not measure sulfur dioxide, they're  
2 totally different instruments.

3 The monitoring that was done was both  
4 for nitric oxide and for nitrogen dioxide.

5 Q Okay.

6 A Nitrogen dioxide is the pollutant of  
7 concern in terms of public health and ambient air  
8 quality standards, and those are the data that we  
9 reported.

10 Q Okay, maybe I made a mistake then.  
11 Okay, then did you take three previous years of  
12 studies in Pittsburgh?

13 A In the AFC in section 8.1 we presented  
14 ten years worth of data for each pollutant,  
15 covering the period of 1988 through 1997, which  
16 were the ten most recent years for which data were  
17 available.

18 And then when we prepared our ambient  
19 air quality impact analysis to take a look at what  
20 current representative air quality data were, we  
21 used the highest concentration from the last three  
22 years, which would have been 1995, 1996 and 1997.

23 Q Okay, was this data modeling data, or  
24 was it the actual data, I mean the actual sampling  
25 on a regular basis?

1           A     I believe your question was about actual  
2     monitor data, and that's what my answer addressed,  
3     was these --

4           Q     Right, I know --

5           A     -- are monitored --

6           Q     -- I'm asking another question.

7           A     These were monitored data collected by -  
8     -

9           Q     Okay, --

10          A     -- the Bay Area Air Quality Management  
11     District.

12          Q     Oh, they were monitored, okay. I'm  
13     sorry, I missed -- didn't get that. I'm not good  
14     at following an outline.

15                 Okay, let's see here, --

16          Q     Take your time.

17          A     Okay, with respect to the mitigation,  
18     all right, you brought out that you did mitigation  
19     from all over the Bay Area basically through the  
20     banking system by the Bay Area Air District  
21     Quality Management.

22                 How much percentage is actually within  
23     the five-mile affected zone that the CEC is saying  
24     the five-mile zone for the plant, itself?

25          A     Actually I did not say that we took our

1 mitigation from all over the Bay Area. That was  
2 the question, I believe, by Mr. Ratliff as to what  
3 the Bay Area District regulations allowed.

4 And I indicated that under their  
5 regulations we were allowed to get emission  
6 reduction credits from anywhere within the nine  
7 county region. We did not do that.

8 Q Okay, where --

9 A We focused our efforts on sources that  
10 were closer to the facility.

11 Q All right, and what percentage is within  
12 five miles?

13 A I don't know the answer to that question  
14 without having to actually go through and take out  
15 a tape measure and get the addresses for the  
16 specific facilities.

17 Q So you have no guess that you could give  
18 me, an estimate?

19 A I would not guess.

20 Q Okay. Well, I would like to have that  
21 information. How can I get it here?

22 HEARING OFFICER GEFTER: Mr. Rubenstein,  
23 would you be willing to provide that information  
24 to the --

25 MR. RUBENSTEIN: I'd be willing to

1 provide -- let me restate the question so I'm sure  
2 I know what's being asked. You want to know what  
3 fraction -- Mr. Hawkins, you want to know what  
4 fraction of our emission offsets are being  
5 provided within a five-mile radius of the project  
6 site?

7 MR. HAWKINS: Right.

8 MR. RUBENSTEIN: Okay. Yes, I'll  
9 calculate that during a break and be able to  
10 present that later this evening.

11 HEARING OFFICER GEFTER: Thank you.  
12 Next question, please.

13 MR. HAWKINS: All right.

14 BY MR. HAWKINS:

15 Q You know there's a law, SB-25, you've  
16 heard of this?

17 A Yes, I'm generally familiar with that  
18 statute.

19 Q And what do you know about it  
20 considering the health risks of children?

21 A I know that it requires the California  
22 Air Resources Board to review all of their health-  
23 based air quality standards to determine whether  
24 they adequately protect children, and if  
25 necessary, to revise those standards on the



1 schedule that's set forth in the law.

2 Q Okay. And then I got a question, but I  
3 forgot what it led to.

4 Contaminant at the air site, what I  
5 really want to bring out here is I want to ask  
6 you, okay, as far as the VOCs, now what happens at  
7 night time when the VOCs come out of the stack and  
8 there's no sunlight to change them into ozone?  
9 What happens to those VOCs?

10 A Generally they will tend to oxidize as  
11 they do during the daytime, but at much much lower  
12 rate.

13 Q Right, so you're going to be breathing  
14 the actual chemicals that are coming out of the  
15 stack a lot longer then, is that what you're  
16 saying, until the next morning when the sun comes  
17 up, and then they oxidize a lot faster? Is  
18 that --

19 A No, because no one is going to be in the  
20 plume and no one is going to be breathing the  
21 plume until it has been diluted to the point where  
22 concentrations are immeasurable.

23 The concentrations of organic compounds  
24 in the stack are already at the limits of  
25 protection.

1           Q     Okay, and then what about when there's a  
2     lot of moisture in the air and they attach to  
3     those particles, and then they cool down, go down  
4     to the ground?

5                     Now are they going to be breathing  
6     those, say like a fog comes in, are they going to  
7     breathing it?

8           A     No, to the extent that you have  
9     pollutants attaching themselves to moisture  
10    droplets that deposit onto the ground, you're not  
11    going to be breathing them because they will be  
12    deposited onto the ground. Or maybe I'm not  
13    understanding your question?

14          Q     Okay, all right, so you got moisture  
15    coming in, fog comes in, a cloudbank of fog. And  
16    then you have the stack putting out its  
17    pollutants. The fog grabs the stack pollutants.  
18    They attach to the water molecules. As you know,  
19    water cleans the air.

20                    And then those water molecules, as they  
21    cool, they're going to go lower faster because  
22    they're heavier now, they're water molecules.  
23    You've also got the pollutants mixed in with the  
24    water molecules. And are people going to be  
25    breathing those pollutants?

1           A     People -- there were a number of  
2           incorrect assumptions in what you said. The first  
3           part, under conditions, weather conditions when  
4           you would have fog in the area, likely you're  
5           going to have the pollutants from this plant being  
6           above the fog level, and not reach the ground at  
7           all. Because the height of the plume is much  
8           greater than the height of the fog bank.

9                     But, be that as it may, the  
10          concentrations of pollutants under the kinds of  
11          conditions you're talking about will be no greater  
12          than the worst case of concentrations that we  
13          predicted using our dispersion modeling analyses.

14          Q     Okay, and then what about when it rains?  
15          What's those air pollutants going to do in the  
16          rainwater, and what percentage did you calculate  
17          as far as runoff from those air pollutants out of  
18          your site?

19          A     Runoff is not an air quality question.  
20          People don't breathe runoff, and so we did not  
21          look at that. But the answer to your question, I  
22          think, is that we were conservative in that we  
23          assumed that all pollution from the plant stays in  
24          the air where people can breathe it. That is the  
25          worst case assumption.

1                   And we showed that using that worst case  
2                   assumption that the levels are safe.

3                   Q     Okay, and then on a worst case  
4                   assumption, then, did you calculate into down  
5                   drafts, the whole works? I mean even air --

6                   A     I think the term you're referring to  
7                   there is downwash, and yes, we did take into  
8                   account downwash.

9                   Q     Okay, and what if there's a lot of  
10                  downwash at that time period, say a day, 24-hour  
11                  period, or something, there's been quite a bit of  
12                  downwash in this area?

13                  A     Our analyses take into account worst  
14                  case downwash conditions that were observed in  
15                  four years worth of data that were collected at  
16                  the Pittsburgh Power Plant.

17                  Q     And you're saying this is not going to  
18                  affect the public health, or are you saying that  
19                  it will?

20                  A     I'm saying that it will not.

21                  Q     Okay, let me see what else. As far as  
22                  respect to toluene, benzene and all the other  
23                  chemicals that are going to be released from this,  
24                  now what do you understand as far as what it's  
25                  going to do to a person's health?

1           A     I'm not --

2           MR. HARRIS: Susan, can I object at this  
3 point and ask that that question be held for the  
4 public health segment. He's asking a public  
5 health question, I believe.

6           MR. HAWKINS: Well, the reason I'm  
7 asking is because he just said that it wouldn't  
8 affect the health, and so he seems to be  
9 knowledgeable about that.

10          HEARING OFFICER GEFTER: You can ask the  
11 question and if the witness doesn't know the  
12 answer, then you can ask the question again when  
13 we get to the public health section.

14          MR. HAWKINS: Okay.

15          HEARING OFFICER GEFTER: You may ask the  
16 question.

17          MR. RUBENSTEIN: Your question that you  
18 asked first that I answered no, it won't affect  
19 the public health, had to do with criteria  
20 pollutants which is what I thought you were  
21 talking about, pollutants, ambient air quality  
22 standard.

23                 Your second question now relates to  
24 specific health impacts associated with specific  
25 compounds. I do not have expertise to deal with

1           that. Mr. Lowe would be prepared to discuss that.

2           BY MR. HAWKINS:

3           Q       So then would you say that was correct  
4           to say that it will not affect the public's  
5           health, then, if you have no expertise in that  
6           area?

7           A       I --

8                   HEARING OFFICER GEFTER: Excuse me,  
9           that's an argumentative question, so we'll strike  
10          that --

11          MR. HAWKINS: Oh, sorry.

12          HEARING OFFICER GEFTER: -- and if you  
13          have a question regarding public health we'll save  
14          it until the public health witness testifies.

15          Okay, thank you. If you have any other  
16          questions of this witness, you may proceed.

17          MR. HAWKINS: Yeah, I have some more.

18          BY MR. HAWKINS:

19          Q       Regards to environmental justice, from  
20          what I've got here --

21          HEARING OFFICER GEFTER: Excuse -- Mr.  
22          Hawkins, environmental justice is a separate  
23          topic.

24          MR. HAWKINS: Oh, sorry.

25          HEARING OFFICER GEFTER: This witness is

1       talking about air quality.

2               MR. HAWKINS:  Oh, okay, I'm sorry.  I'm  
3       trying to figure out how to word this.  Because  
4       air quality and environmental justice, as the  
5       applicant brought, are all combined.

6               HEARING OFFICER GEFTER:  When we get to  
7       the environmental justice topic, you may ask  
8       questions about the air quality as it affects the  
9       area that you're concerned with.

10              MR. HAWKINS:  Okay, I'll turn it over to  
11      Mike, here.

12              HEARING OFFICER GEFTER:  Okay.  Is your  
13      cross-examination complete now?

14              MR. HAWKINS:  As far as I know, yeah.

15              HEARING OFFICER GEFTER:  Thank you.  
16      Okay, Californians for Renewable Energy, you may  
17      cross-examine the witness on air quality.

18                      CROSS-EXAMINATION

19      BY MR. BOYD:

20              Q       My first question is I have this letter  
21      here -- actually I have a question on whether or  
22      not this is the right witness for me to ask these  
23      questions.

24                      There's been issued a final  
25      determination of compliance by the Bay Area Air

1       Quality Management District.

2               HEARING OFFICER GEFTER:  Yes, there will  
3       be a witness testifying from the Bay Area later.  
4       This witness is sponsored by staff.  If you have  
5       questions regarding the final determination of  
6       compliance, you may ask the witness from the Bay  
7       Area.

8               MR. BOYD:  Well, what I wanted to ask is  
9       a question of the applicant about the FDOC.

10              HEARING OFFICER GEFTER:  You may ask  
11      that question.

12              MR. BOYD:  That's okay?

13              HEARING OFFICER GEFTER:  If it's an air  
14      quality question, yes.

15              MR. BOYD:  Okay.

16      BY MR. BOYD:

17              Q       First, my question is on the cover  
18      letter here from the BAAQMD it says that --

19              HEARING OFFICER GEFTER:  Are you  
20      referring to the cover letter that came with the  
21      FDOC?

22              MR. BOYD:  Yeah.

23              HEARING OFFICER GEFTER:  Okay, that  
24      would be --

25              MR. BOYD:  To Mr. Douglas Buchanan from



1 Dennis Jang.

2 HEARING OFFICER GEFTER: That's exhibit  
3 58.

4 BY MR. BOYD:

5 Q Okay, and in there it says, please be  
6 advised the FDOC constitutes a final PSD permit  
7 under 40 CFR 52.21, and the terms of the  
8 District's delegation of authority from the USEPA  
9 under that section. The final PSD permit will not  
10 become effective for 30 days from the date of  
11 issuance of the FDOC.

12 This was issued, it's dated the 22nd.  
13 That means that the deadline to appeal the PSD  
14 permit would then be the 21st?

15 HEARING OFFICER GEFTER: Are you asking  
16 a question of the witness, or are you asking a  
17 question of the Committee? Because --

18 MR. BOYD: I'm trying to get a point of  
19 clarification, I guess, --

20 HEARING OFFICER GEFTER: Okay, I think  
21 that what you need to do is ask that question of  
22 the Bay Area District's

23 MR. BOYD: Okay, well, I'll assume that  
24 that --

25 HEARING OFFICER GEFTER: -- District's

1       representative.

2               MR. BOYD:  -- that what it says -- that  
3       what I'm saying is the case.  My question of the  
4       witness --

5               HEARING OFFICER GEFTER:  Okay, you may  
6       ask a question.

7               MR. BOYD:  -- here now is:

8       //

9       BY MR. BOYD:

10            Q       Basically this is a done deal as far as  
11       I can tell --

12            HEARING OFFICER GEFTER:  You're talking  
13       to the witness.  I'd like a question.

14            MR. BOYD:  My question --

15            HEARING OFFICER GEFTER:  Please just  
16       frame it as a question.

17            MR. BOYD:  Okay.

18            HEARING OFFICER GEFTER:  Thank you.

19       BY MR. BOYD:

20            Q       Assuming this is approved how does this  
21       relate to the applicant?  Is the applicant then --  
22       is this their conditions of approval?  Are they  
23       adopting whatever came out of this document as  
24       their own, basically what they're proposing, too,  
25       is what I'm trying to find out?

1                   Or is there a difference in what you're  
2           proposing from what came out of this document?  
3           And if there is --

4                   HEARING OFFICER GEFTER:   Are you talking  
5           to the applicant?

6                   MR. BOYD:   Yeah, I'm asking the  
7           witness --

8                   HEARING OFFICER GEFTER:   Okay, could you  
9           just frame the question?

10                  MR. BOYD:   I'm asking the witness to  
11           identify for me any differences in your position  
12           on this matter from those of the FDOC.

13                  HEARING OFFICER GEFTER:   Okay.   Do you  
14           understand the question, Mr. Rubenstein?

15                  MR. RUBENSTEIN:   Not really, but I'll  
16           give it a try.

17                  HEARING OFFICER GEFTER:   Okay, he's  
18           going to answer your question.

19           BY MR. BOYD:

20                   Q       Specifically related to air quality.

21                   A       We have no objections to the proposed  
22           conditions contained in the final determination of  
23           compliance as corrected by the District's errata.

24                   Q       Okay.   Then my other question is I have,  
25           in the process here they have a preliminary

1 determination of compliance. In that process  
2 there was issued a letter from the EPA, Region 9,  
3 from a gentleman named Matt Haber to permits  
4 office. And it was their comments in regards to  
5 the preliminary determination of compliance on the  
6 Delta Energy Center.

7 HEARING OFFICER GEFTER: Yes, that's  
8 exhibit 57.

9 MR. BOYD: Thank you.

10 BY MR. BOYD:

11 Q Have you all had an opportunity to  
12 review this?

13 A Yes, I have.

14 Q And the reason I raise this is earlier  
15 on you were stating your testimony that you --  
16 that basically were stating my position, okay, --

17 HEARING OFFICER GEFTER: Would you ask  
18 the question, please. That's a statement.

19 MR. BOYD: I'm going to ask the  
20 question, but first I have to read the whole thing  
21 of what the EPA letter that I cited said.

22 HEARING OFFICER GEFTER: You don't need  
23 to read it. We have it, it is exhibit 57.  
24 Everybody has it.

25 MR. BOYD: Okay.

1 HEARING OFFICER GEFTER: Thank you.

2 BY MR. BOYD:

3 Q In exhibit 57 they talked about inter  
4 pollution trading. Specifically what I was  
5 concerned about in my testimony was that they  
6 cited that your plan to provide 81.8 tons of VOC  
7 ERC in place of the required NOx ERCs, and then it  
8 says in the EPA's notice proposed limiting  
9 approval disapproval of regulation 2, rules 124 --  
10 2 and 4, EPA identified interpollution trading of  
11 NOx and VOC as a significant approvability issue.

12 The District rules do not contain  
13 adequate safeguards to insure and overall air  
14 quality benefit from this type of trading.

15 Then I go on and I look at --

16 HEARING OFFICER GEFTER: Let's just ask  
17 the --

18 MR. BOYD: -- the BAAQMD --

19 HEARING OFFICER GEFTER: Let's ask the  
20 question.

21 MR. BOYD: Well, I'm going to ask the  
22 question. I look in these documents, I've looked  
23 at the staff system, and I've looked at your  
24 documents but I can find nowhere in any of these  
25 documents where it addressed this EPA concern.

1 HEARING OFFICER GEFTER: Okay, is that  
2 your question to the witness?

3 MR. BOYD: That's my question.

4 BY MR. BOYD:

5 Q Where do you satisfy this concern from  
6 the EPA is what I'm trying to find out. In any of  
7 the documents that you wish to cite.

8 A The EPA's letter asked or expressed  
9 concern about a Bay Area District regulation, in  
10 the sentences that you just read, not about this  
11 permit in particular.

12 They expressed concerns about whether  
13 the Bay Area District's rules had adequate  
14 protection regarding interpollutant tradeoffs.

15 The Bay Area District's response to that  
16 comment in the context of this permit was to  
17 prepare specific supporting analyses to justify or  
18 support the use of a particular ratio. And that  
19 support is found in attachment 1 to the final  
20 determination of compliance, which is a Bay Area  
21 District policy memorandum that discusses an  
22 appropriate offset ratio between NOx and  
23 hydrocarbon emissions or POC, and in attachment 2,  
24 which discussed an interpollutant tradeoff ratio  
25 between sulfur dioxide or SOx emissions and PM10.

1                   And those two attachments, in my  
2                   opinion, were the Bay Area District's response to  
3                   that comment from EPA.

4                   Q     Okay. This one, the first thing you  
5                   cited was attachment 1. And it wasn't clear to me  
6                   who this is from, who it's to, who the parties  
7                   they are representing in this. Doesn't have a  
8                   letterhead or say that it's Bay Area Air Quality,  
9                   so do you have the answer to who these people are  
10                  and who they represent?

11                  A     Well, Mr. Jang from Bay Area District  
12                  can better respond, but Mr. DeMandel, Mr. Perardi  
13                  and Mr. Hass are all employees of the Bay Area Air  
14                  Quality Management District. Mr. Hass is the  
15                  Deputy Air Pollution Control Officer. Mr. Perardi  
16                  is the Director of Planning, and I'm afraid I  
17                  don't remember Mr. DeMandel's title.

18                  Q     Okay, I just didn't know who they were,  
19                  it doesn't say anything on here.

20                         Okay, now so the applicant answered my  
21                  question in that regard.

22                         My next question is in regards to once  
23                  again citing this letter, --

24                         HEARING OFFICER GEFTER: Exhibit 57.

25                         //

1 BY MR. BOYD:

2 Q Exhibit 57. The EPA does not agree with  
3 the best available control technology limits for  
4 VOC from the gas turbines burners proposed in the  
5 Bay Area Air Quality Management District in the  
6 preliminary determination of compliance.

7 It goes on to say that as the District  
8 is aware, rule 2 of regulation 2 requires BACT be  
9 at least as stringent as federal lowest achievable  
10 emission rates.

11 Neither the limit listed in the  
12 District's BACT guidelines, 89.S.1, nor expected  
13 VOC emissions rate satisfy federal lowest  
14 achievable emissions rate.

15 HEARING OFFICER GEFTER: Okay, what is  
16 your question?

17 MR. BOYD: My question is, I'm going to  
18 get to this if I don't lose my order here,  
19 basically they then go on, okay, then if you look  
20 in the -- make sure I got the right thing here --  
21 if you look in the final determination of  
22 compliance they're identifying -- they identify,  
23 as you move on, some other projects where they  
24 have had lower emissions for these compounds.

25 And then I look in the final



1 determination of compliance and they're specifying  
2 twice what they call, the EPA called as the lowest  
3 level, which was, in this case, I think 1. ppm by  
4 volume, and you're projecting --

5 MR. HARRIS: Is there a question  
6 forthcoming anytime soon?

7 MR. BOYD: My question is why you didn't  
8 do what the EPA recommended.

9 HEARING OFFICER GEFTER: That's your  
10 question?

11 MR. BOYD: Yeah.

12 HEARING OFFICER GEFTER: Okay. Do you  
13 have an answer? Do you understand the question?

14 MR. RUBENSTEIN: Yes, I believe I do.

15 HEARING OFFICER GEFTER: Thank you.

16 MR. RUBENSTEIN: We did do what the EPA  
17 asked us to do. I specifically discussed this  
18 issue with both Martha Larson and Matt Haber of  
19 the EPA. The nature of the discussion was that  
20 while we agreed that we expect the hydrocarbon  
21 emissions from this plant to be below 1 ppm, that  
22 we were concerned about the ability of the current  
23 EPA source test methods to measure concentrations  
24 that low.

25 As I mentioned during my testimony the

1 concentrations of hydrocarbons in the plant stack  
2 will typically be lower than the concentration of  
3 hydrocarbons in the ambient air, outside of the  
4 stack.

5 Those are very difficult numbers to  
6 measure, and I indicated that if we were to accept  
7 a hydrocarbon limit of 1 ppm, it would not change  
8 the design or operation of the plant in any way,  
9 because we expect our emissions to be that low.

10 It would, however, bring into question  
11 our ability to measure levels that low on a  
12 consistent basis, and from an air quality  
13 perspective, it would mean that we would provide  
14 less mitigation for hydrocarbons. Because when we  
15 did the calculations we would calculate our  
16 emissions based on only 1 ppm instead of 2 ppm.

17 And that means that under the District's  
18 rules, and under the Commission's practices we  
19 would not have to provide this much mitigation as  
20 we currently are. And consequently I suggested  
21 that it would be prudent in terms of what current  
22 measurement technologies, and it would also be  
23 good public policy to keep the limit at 2 ppm,  
24 which would, in effect, force us to provide  
25 mitigation for clean air.

1                   Because we're providing mitigation  
2           that's far in excess of what our emission rates  
3           will be. And my understanding is that EPA, when  
4           they reviewed the Bay Area District's judgment on  
5           this matter, that they did not disagree with that.

6           BY MR. BOYD:

7                   Q     Okay, now in that regard then, do you  
8           believe then that 2 ppm by volume meets EPA's  
9           requirements for lowest achievable emission rate  
10          when it's been demonstrated that lower rates have  
11          been achieved?

12                  A     I believe that this project satisfies  
13          the Bay Area District's requirements for best  
14          available control technology, which are the same  
15          requirements that EPA applies to this project.

16                  Q     Okay, thank you. Okay, my next  
17          question, earlier on the witness said that because  
18          we're using natural gas for the generation of  
19          electricity here, that there wouldn't be the  
20          production of SO2, wouldn't be a major pollution  
21          source from this.

22                         My question, assuming that is correct,  
23          then my question is in your ERC, when you're  
24          talking about you know, interpollution trading,  
25          you're proposing to mitigate using SO2. And if

1 SO2 isn't really a major pollution source from  
2 this project, what are you mitigating, then, is my  
3 question. How are you mitigating it? Why aren't  
4 you using the other ERCs besides SO2 if the  
5 project's not a major source of SO2?

6 MR. HARRIS: I want to object to that  
7 question as unintelligible. Ask him to reframe  
8 it.

9 MR. BOYD: Okay.

10 HEARING OFFICER GEFTER: Yes, would you  
11 reframe it in a very short question.

12 MR. BOYD: Okay, give me one second. I  
13 have to find my testimony -- well, I can't find  
14 it, so what I'll do is I'll move on to my next  
15 question, and then after I find it I'll come back.

16 HEARING OFFICER GEFTER: Okay, next  
17 question, please.

18 MR. BOYD: If that's okay.

19 BY MR. BOYD:

20 Q Okay, my other question is didn't you  
21 say you were associated with the Air Resources  
22 Board? Did you say that? You had some experience  
23 with the Air Resources Board?

24 A Yes, I said prior to founding Sierra  
25 Research in 1981 I was a Deputy Executive Officer

1 for Technical Programs at the Air Resources Board.

2 Q Okay. What I have here is a list that I  
3 got from the Air Resources Board of the ten  
4 largest stationary sources of NOx statewide.

5 Four of those sources are in the San  
6 Francisco Bay Area. They include the Shell  
7 Martinez Refining Company, which is a source  
8 listed here as 4447 tons of NOx per year --

9 MR. HARRIS: Susan, again, please --

10 HEARING OFFICER GEFTER: Okay, I  
11 understand there's an objection to your question.  
12 Instead of going through what you have there on  
13 your list, just get to the question.

14 BY MR. BOYD:

15 Q My question is when you're examining  
16 cumulative impacts of this project in association  
17 with other sources in the air basin, did you  
18 identify these four of ten largest stationary  
19 sources in your analysis?

20 A The analysis that we performed was based  
21 on the measured ambient air quality data. We have  
22 the table you're referring to, which is also in  
23 your testimony, is for oxides of nitrogen  
24 emissions during the 1995 calendar year.

25 We included in our analysis ambient air

1       quality data for a range of years including 1995.  
2       Consequently, any contribution that those four  
3       plants have to air quality in this area would have  
4       been reflected in the data that we used.

5             Q       Okay, in the ambient data is what you're  
6       saying?

7             A       That's correct.

8             Q       It's part of the ambient data?

9             A       That's correct.

10            Q       Now, did you also include in this any  
11       identification of mobile sources of NOx, for  
12       example, traffic?

13            A       Similarly, any emissions of NOx from  
14       mobile sources would have been reflected in the  
15       ambient air quality data that we used.

16                    As I said, in looking at nitrogen  
17       dioxide we looked at the highest one-hour average  
18       concentration measured in Pittsburgh during any  
19       hour of the three years between 1995 and 1997.

20                    Consequently, impacts of traffic from  
21       these ten facilities or for these four facility in  
22       the Bay Area, from all other facilities, are all  
23       going to have your impacts reflected in that  
24       ambient air quality data, and we took that into  
25       account.

1           Q     Now, my other question is in regards to  
2     the project, the final determination of compliance  
3     identifies that there will be the production of a  
4     significant amount of ammonia from the stacks, I  
5     mean it's commonly referred to as ammonia slip, up  
6     to 438 tons per year as identified.

7           My question is in your analysis did you  
8     consider the formation of secondary PM10 from this  
9     ammonia slip in combination with NOx? And if so,  
10    what potential for reduction of PM10 did you  
11    identify?

12          A     First, I don't believe the final  
13    determination of compliance anywhere referred to  
14    the quantity of ammonia as being significant. I  
15    believe that's your description of it.

16          Q     Okay, that's agreeable. It's my  
17    opinion.

18          A     With respect to formation of secondary  
19    pollutants, I indicated that is something that is  
20    of concern and that is the reason why the Bay Area  
21    District's regulations are crafted as they are.

22                The Bay Area District regulates directly  
23    emitted particulate matter, sulfur dioxide, oxides  
24    of nitrogen, and organic compounds as precursors  
25    to PM10.

1                   Their entire regulatory program,  
2           including their emissions offset regional  
3           mitigation program all reflect those precursor  
4           relationships. At the present time, except in the  
5           area of health risk assessments, which Mr. Lowe  
6           will discuss in a little bit, ammonia is not  
7           directly regulated as an emission source anywhere  
8           in California, although many regulatory agencies  
9           are beginning to look at that.

10                   One of the reasons why they have not  
11           done that yet is that most of the sources of  
12           ammonia are not industrial in nature. Most of  
13           them are related to agricultural operations,  
14           livestock and other things that we really don't  
15           want to get into before dinner --

16                   (Laughter.)

17                   MR. RUBENSTEIN: -- and so developing a  
18           regulatory program for those sources is more than  
19           a little complicated.

20                   The way that ammonia is regulated from  
21           industrial facilities such as this is through a  
22           limitation on ammonia slip. The Bay Area District  
23           has established a 10 ppm limit on the amount of  
24           ammonia that can leave the stack. And that is how  
25           that issue's addressed.



1 MR. BOYD: Okay, --

2 HEARING OFFICER GEFTER: Mr. Boyd, how  
3 many more questions do you have?

4 MR. BOYD: I'm just going back to the  
5 one that I lost right now --

6 HEARING OFFICER GEFTER: Just one more  
7 question?

8 MR. BOYD: -- and that's it.

9 HEARING OFFICER GEFTER: Thank you.

10 BY MR. BOYD:

11 Q Okay, now in the -- okay, so what you're  
12 proposing -- my question was you're proposing to  
13 use SO2 ERCs to offset proposed PM10 emission  
14 increases, okay.

15 And my question is why are you using SO2  
16 as the ERC when the major source in California, is  
17 my understanding, of PM10 isn't SO2 in reaction  
18 with NOx, but ammonia.

19 And my understanding was that SO2 is a  
20 major source of particulate matter on the East  
21 Coast, so my question is --

22 HEARING OFFICER GEFTER: Excuse me, Mr.  
23 Boyd, just get to the question.

24 BY MR. BOYD:

25 Q -- why -- once again, how does using SO2

1       ERCs mitigate impacts that are going to occur from  
2       the ammonia in forming PM10?

3           A       The mitigation that we propose for our  
4       particulate emissions is directed at mitigating  
5       the PM10 emissions from our facility. And the  
6       PM10 emissions are direct combustion particulate  
7       from our facility, which is a very small component  
8       of what we breathe in the air.

9                   Most of what we breathe in the air is  
10       not ammonium nitrate. That is a large component.  
11       And what is the principal component varies in  
12       different places in the Bay Area. We have our  
13       highest PM10 levels in the wintertime. Someone  
14       from the Bay Area District a few days ago told me  
15       that the highest PM10 concentrations tend to occur  
16       on Thanksgiving, Christmas and New Years  
17       corresponding to when people tend to light up  
18       their fireplaces.

19                   And, in fact, that's not just anecdotal,  
20       but analyses of what's in ambient particulate  
21       matter that have been done on a detailed level  
22       indicate that the type of combustion particulate  
23       associated with wood-burning fireplaces is one of  
24       the larger sources in the Bay Area.

25                   Particulate sulfate is a contributor.

1       It's not a large contributor. And that's why the  
2       Bay Area District required us to provide three  
3       tons of sulfur dioxide reduction for every one ton  
4       of particulates that we increase.

5               It's to take into account the fact that  
6       sulfur is a lesser contributor. And that's why we  
7       have to provide offsets at a three-to-one ratio  
8       for that pollutant.

9               And we did that because that appeared to  
10      be the most reasonable locally available source.  
11      We could have gone further distances for directly  
12      emitting particulate matter, but in trying to  
13      balance the competing interests and the desire of  
14      both the Commission and the community, that we get  
15      offsets closer to the source, we selected as part  
16      of our mitigation package the source of sulfur  
17      dioxide.

18             Q       Okay, thank you. One last one, sorry.  
19      My question is on the ERCs, Mr. Hawkins brought it  
20      up a little bit before, I have a hard time  
21      understanding how you're going to mitigate  
22      emissions by using -- trading ERCs outside the  
23      impact area.

24             I fail to see that. Is there any way  
25      you can enlighten me on how that's going to

1       actually mitigate any of the emissions from the  
2       project by using ERCs that are outside the area?

3           A     Actually, I believe I explained that in  
4       my direct testimony at the beginning.

5           Q     Could you rephrase it, --

6           A     We have to --

7           Q     -- restate it?

8           A     We have to -- yes, I will restate it for  
9       you.

10          Q     Thanks.

11          A     We have to demonstrate that our project  
12       is going to be safe on the local level, and we  
13       have done that without taking into account any  
14       emission credits.

15                We did that through the dispersion  
16       modeling analyses, we did that through our  
17       demonstration of use of best available control  
18       technology, and we did that through the health  
19       risk assessment that Mr. Lowe is going to discuss.

20          Q     Okay.

21          A     The emission reduction credits that we  
22       provided which were mandated by the Bay Area  
23       District, mandated under state law, and mandated  
24       under federal Clean Air Act law, are part of a  
25       regional mitigation program that are not intended

1 to address local air quality impacts.

2 That's why you need to do both. That's  
3 why you need to look at local air quality impacts,  
4 in the absence of any mitigation, and you need to  
5 look at mitigation to address your contribution to  
6 the regional problem.

7 And that's why it's acceptable, and I  
8 believe appropriate, for us to be required to  
9 provide those offsets.

10 MR. BOYD: Thank you. I'm done.

11 HEARING OFFICER GEFTER: Do any of the  
12 other -- what will occur next is that staff will  
13 present direct testimony on air quality.

14 As we haven't had a break now for almost  
15 two hours, we're going to take a recess and  
16 reconvene in about five minutes.

17 MR. HARRIS: Susan, I have a couple  
18 redirects for Gary, though, before we go to staff.

19 HEARING OFFICER GEFTER: We'll do that  
20 after the recess. Thank you.

21 MR. HARRIS: Thank you.

22 (Brief recess.)

23 PRESIDING MEMBER KEESE: At this time we  
24 are looking at midnight, it looks like, the  
25 schedule we're on. And the Committee is going to

1       have a very difficult time scheduling another  
2       hearing.

3               So let's be optimistic that we can make  
4       it by midnight. And at this time we're going to  
5       allow some members of the public who cannot stay  
6       around very long to make some very brief comments  
7       before we start up with this proceeding again.

8               So, Ms. Gefter, would you like to --

9               HEARING OFFICER GEFTER: Yes. We're  
10       going to allow Mr. Harris to complete his redirect  
11       of his witness. And then we're going to take a  
12       break and hear from members of the public.

13              So, Mr. Harris, you said you had a few  
14       more questions on redirect.

15              MR. HARRIS: Just a few questions to  
16       actually clean up a few things.

17              REDIRECT EXAMINATION

18       BY MR. HARRIS:

19              Q     Gary, I want to talk about the Bay Area  
20       District Reg 9, rule 11. There was an issue that  
21       was outstanding with Mr. Ratliff's questioning,  
22       and I wondered if you had the answer for us on  
23       that issue?

24              A     Yes. The reductions are specified in  
25       reg 9, rule 11, section 309, and they require a 90

1       percent reduction in NOx emissions on a systemwide  
2       average basis between 1997 and 2005.

3           Q     Thank you. And do you have a brief  
4       update, too, on the status of the monitoring  
5       station for Paulette?

6           A     Yes. Ms. Lagana had asked when the new  
7       location was going to be operational. The Bay  
8       Area Air Quality Management District approved the  
9       revised monitoring site yesterday, November 17th.  
10      The contractor was released by Calpine yesterday  
11      to begin the relocation.

12                As I mentioned earlier site preparation  
13      is going to begin tomorrow. We do not have a  
14      schedule yet from the contractor as to exactly  
15      when the relocation is to occur, but we expect it  
16      to occur rapidly. They have been tasked with  
17      doing it as quickly as they can.

18                We do need to get building permits from  
19      the City of Antioch which is in the critical path,  
20      and that process has begun. And we will docket  
21      and serve on the service list a schedule for  
22      relocation as soon as that becomes available.

23           Q     Now, with regard to a question Joe  
24       Hawkins had posed about the ERCs in the five-mile  
25       radius, did you have a chance during the break to

1 take a look at that issue?

2 A I did. And the list of emission  
3 reduction credits that we're providing is included  
4 in the final determination of compliance. Looking  
5 quite literally at a five-mile radius, roughly 22  
6 percent of the tons of credits that we're  
7 providing come from within a five-mile radius.

8 In addition to that we're obtaining  
9 emission reduction credits from Crockett, which I  
10 believe is in the same immediate air shed that  
11 we're talking about here, including those credits,  
12 one-third of the credits that we're getting are  
13 from within the community.

14 And, frankly, in my experience in  
15 working on power development projects that's a  
16 very large percentage of the credits coming from  
17 within a very small area.

18 Q Thanks. Couple other questions. Joe  
19 Hawkins had asked about questions related to rain  
20 and the effect those would have on some of the air  
21 emissions. And my question for you is do you know  
22 of any state or federal regulations that would  
23 require the kind of modeling or analysis that Joe  
24 Hawkins asked for?

25 A No, I'm not aware of any.



1           Q     Let me ask you a couple questions again  
2     about the final staff assessment.  You've had a  
3     chance to review the final staff assessment?

4           A     Yes, I have.

5           Q     And you've had the opportunity to review  
6     the conditions of certification set forth therein?

7           A     Yes, I have.

8           Q     And do you find those conditions  
9     acceptable?

10          A     Yes, subject only to the same errata  
11     corrections that have been proposed by the Bay  
12     Area Air Quality Management District.

13                 MR. HARRIS:  I have nothing else, Susan,  
14     thank you.

15                 HEARING OFFICER GEFTER:  Any recross?

16                 MR. RATLIFF:  No.

17                 MR. HAWKINS:  I would like to.

18                 HEARING OFFICER GEFTER:  You have a  
19     recross, okay.  One question, yes.

20                 MR. HAWKINS:  Just one, only?

21                 HEARING OFFICER GEFTER:  Well, no, but  
22     keep it short.

23                         RE CROSS-EXAMINATION

24     BY MR. HAWKINS:

25           Q     What I wanted to know is on the air

1 emissions, I was talking about those, the ERCs, is  
2 any of those plants, are they already closed?  
3 Those credits that you got.

4 A Yes, some of them are.

5 Q Can you name them?

6 A Not without looking at more details. In  
7 some cases the emission reduction credits came  
8 from the shutdown of equipment at a plant where  
9 the plant, as a whole, did not shut down. An  
10 example of that is some boilers that were located  
11 at Crockett where the facility still remains.

12 In other cases, an entire plant would  
13 have been shut down. There's a facility in  
14 Antioch that fits that description.

15 Q Okay, and then I have another question  
16 as far as the -- what do you call it, the  
17 monitoring station that you said that was  
18 contaminated, or how did you word it?

19 A I did not use those words at all.

20 Q I can't remember how you worded it, but  
21 anyway it didn't pass as far as the Bay Area  
22 District Quality --

23 A I did not say that, either.

24 Q Can you explain what you said to me?

25 A I believe you're referring to some

1 statements that Ms. Lagana made, and I indicated  
2 to her that I have no personal knowledge of those  
3 statements or those conclusions because I was not  
4 involved in that decision by the Bay Area Air  
5 Quality Management District.

6 Q Okay. And then there was one other  
7 question, I'm trying to remember -- can you hold  
8 on a sec?

9 A Sure.

10 MR. HAWKINS: My mind's a blank. Just  
11 can I ask them later when we're doing all the  
12 reviewing, as my memory comes back? I'm losing my  
13 concentration --

14 HEARING OFFICER GEFTER: Yes, you may  
15 ask a question later.

16 MR. HAWKINS: Okay, thank you.

17 HEARING OFFICER GEFTER: Yes. Okay. At  
18 this point I know we have a couple of members of  
19 the public who are here to address us, so we're  
20 going to move away from air quality for a few  
21 minutes and invite members of the public to  
22 address the Committee, because we understand they  
23 have to leave.

24 Yes, please, you'll have to come up to a  
25 microphone. Thank you.

1                   MR. TURNER: Good evening, Mr. Chairman  
2                   and Members of the Commission, my name is Darnell  
3                   Turner, and I'm the Political Action Chair for the  
4                   California's branches of the NAACP for Northern  
5                   California Section of the State Conference.

6                   And previously when the hearings first  
7                   started regarding this program we had officially  
8                   stated our support of the project. And we voiced  
9                   our concerns regarding the environmental justice  
10                  and fairness as it relates to minority  
11                  communities.

12                  And as we said before, and I'm just  
13                  going to reiterate basically some of the things we  
14                  had said in the previous testimony, is that we are  
15                  concerned with the fact that we want to make sure  
16                  that all the safety requirements are met, and that  
17                  the project will benefit the community  
18                  economically without causing any harm to the  
19                  environment and any kind of negative impact to the  
20                  minority communities which may be bordering close  
21                  to the project that's already being proposed.

22                  And with that, we also feel comfortable  
23                  with the information we've already read and  
24                  reviewed, that all the requirements will be met  
25                  and meet the satisfaction of our organization and

1 people within the community of Pittsburg.

2 And, so therefore we offer our support  
3 and any other assistance we can provide to the  
4 Commission and any of the staff members.

5 HEARING OFFICER GEFTER: Thank you.

6 PRESIDING MEMBER KEESE: Thank you.

7 COMMISSIONER PERNELL: Thank you.

8 HEARING OFFICER GEFTER: Okay.

9 MR. BACA: Hi, my name is Tom Baca. And  
10 I'm Vice President of the Central Labor Council of  
11 Contra Costa County and Vice President of the  
12 Building Trades of Contra Costa County.

13 I'm here to represent our 70,000 members  
14 in this County. I'm also a member of Boilermaker  
15 Local 549 at 2191 Piedmont Way in Pittsburg,  
16 California.

17 We're satisfied with this project.  
18 We've been with it from the beginning. It offers  
19 local hire, good wages, apprenticeship training to  
20 members of our community. And we would just like  
21 the members here to know, and all the people here,  
22 that we support the project strongly, and are in  
23 support of it.

24 Thank you.

25 PRESIDING MEMBER KEESE: Thank you.

1 HEARING OFFICER GEFTER: Thank you.

2 COMMISSIONER PERNELL: Thank you.

3 HEARING OFFICER GEFTER: Is there  
4 someone else who wanted to address the Committee  
5 at this time who indicated they had to leave?

6 MR. LEROY: I suppose I will.

7 HEARING OFFICER GEFTER: Okay.

8 MR. LEROY: Doesn't seem like there's  
9 very many activists around. I was impressed with  
10 these people --

11 HEARING OFFICER GEFTER: Would you  
12 please identify yourself?

13 MR. LEROY: Sure. I'm known as "The  
14 Tree Man," William Leroy from Antioch. And I  
15 cover a wide range of political issues. This is  
16 quite a confusing one, especially considering  
17 you'd have to know physics in order to understand  
18 what some of these questions are about.

19 However, I was, at one time, and now my  
20 son is, an athlete; and I can tell you, as a  
21 jogger, I jog this waterfront all the way down  
22 here and I know Dow's backyard, and I know pretty  
23 much all this whole waterfront.

24 And now I have a boat and I go out on  
25 these waters and I see what kind of things the

1 river is being subjected to from power plants, not  
2 just these that are proposed. We're talking  
3 injection into the river right, correct?

4 I'm sorry, was that Sierra Club?

5 HEARING OFFICER GEFTER: Okay, well, I'm  
6 sorry --

7 MR. LEROY: Oh, Mr. --

8 HEARING OFFICER GEFTER: -- excuse me,  
9 you're just addressing the Committee --

10 MR. LEROY: I'm not allowed to address  
11 them?

12 HEARING OFFICER GEFTER: No. You talk  
13 to us, please.

14 MR. LEROY: Oh, just to you?

15 HEARING OFFICER GEFTER: Yes.

16 MR. LEROY: Well, over the years I have  
17 seen the air quality diminish. I now have a 24-  
18 inch forced main coming down my street, and I see  
19 a map of it over there. And it's going right to  
20 this power plant.

21 Now, when was the public told? The  
22 infrastructure is already in for this. They're  
23 now asking?

24 So, when the sewage lines are already in  
25 and the infrastructure is already in, and the

1 sanitation plant, I think, is located and took out  
2 this whole part of the waterfront, our city has  
3 suffered significantly. I don't know if that's a  
4 question or works into your little trial, but I  
5 come from a long line of people who have fought  
6 for this country, and I can't believe people can  
7 come in here and poison my children, poison the  
8 community, and then turn around and say it's for a  
9 benefit.

10 I'm willing to do without electricity.  
11 I'll challenge anybody who says that we have to  
12 have electricity in order to die. We've got to  
13 get this under control, whether PG&E or Southern  
14 now is going to shut down and comply. And these  
15 people come on with their cleaner burning plant.

16 I'm all for it. But to bring them both  
17 on line, this is insanity. Now, I'm all for union  
18 jobs, I'm all for people working. I think that's  
19 a great thing. But poisoning children?

20 What -- you know, we need to reduce the  
21 amount of pollution, not increase it. You're  
22 talking about increase, no matter how you deal  
23 with it. If Southern continues to operate those  
24 two plants, we are being subjected to more  
25 pollution. And at the same time, to burn that



1       sewage, because this place is already max'd out.  
2       It can't handle any more sewage. So now they're  
3       going to evaporate it off?

4               This is not a power plant. This is a  
5       waste burner. And so what they're doing here is  
6       accommodating new residential growth and telling  
7       them quality of life, come over here, we love you  
8       to come here, we want your children, we want your  
9       schools, we want -- and then they're poisoning the  
10      air at the same time.

11              Now, how can you do that duality and  
12      somebody from the government should come in and  
13      oversee this, because this is -- somebody needs to  
14      look at the whole picture here. Each are --  
15      they're looking at their profits, Southern's  
16      looking at their profits. Who's looking at the  
17      air really subjectively?

18              I've seen the Bay Area Air Quality  
19      Management District ten years ago tell us that GWF  
20      factories are going to clean up the air. They  
21      didn't clean up the air.

22              And I'm not blaming anybody here. I'm  
23      just saying, let's bring regulation, shut down the  
24      PG&E plants before your plants come in. There's  
25      got to be something to work there. There can't

1 be, you can't come in here and pollute the air  
2 even more and say that somehow that's going to  
3 help us.

4 Because everybody knows whether Darnell  
5 Turner knows it or not, it's not about minorities.  
6 Most of the people out here are here because they  
7 got kicked out of the high end residential areas  
8 of the Bay Area. And I happen to be one of those.  
9 And I definitely feel like a minority here.

10 Because I believe that people should  
11 stand up the way they did in World War II, they  
12 way they did in the Korean War, the way they've  
13 done in all our wars, and stand up and stop people  
14 from poisoning them slowly.

15 You know, a person's value comes at the  
16 end of life, when they've accumulated all that  
17 knowledge. And to think they're going to end up  
18 in a hospital having to deal with tumors and all  
19 the other stuff that this stuff creates. Even the  
20 possibility.

21 Now, I don't think there's anybody up on  
22 that panel that wants one person to die. And  
23 isn't it true that your plant will probably kill  
24 one person in the next five years? Legalized  
25 murder.

1 Thank you.

2 HEARING OFFICER GEFTER: Thank you.

3 We're going to now move on to take additional  
4 testimony on air quality.

5 And it is staff, and staff's witnesses,  
6 time for your direct.

7 MR. RATLIFF: Staff witness is Magdy  
8 Badr. And I think the other staff witness should  
9 probably testify at the same -- well,  
10 subsequently, but I'll have them both up as a  
11 panel for questions, because their topic overlaps.  
12 The other staff witness for the cumulative impact  
13 analysis is Guido Franco.

14 And I'll start with Mr. Badr and then  
15 I'll go to Mr. Franco subsequently. And I would  
16 request that both of them do their testimony  
17 before the cross-examination begins.

18 HEARING OFFICER GEFTER: That would be  
19 fine. Okay, and we need to swear the witnesses.  
20 Whereupon,

21 MAGDY BADR and GUIDO FRANCO  
22 were called as witnesses herein, and after first  
23 having been duly sworn, were examined and  
24 testified as follows:

25 //

1 DIRECT EXAMINATION

2 BY MR. RATLIFF:

3 Q Mr. Badr, did you prepare the staff  
4 testimony entitled air quality which is part of  
5 the staff's final staff assessment in this case?

6 A Yes, I did.

7 Q Do you have any changes to make in that  
8 testimony today?

9 A Yes, I have three changes. One on page  
10 32, condition of certification 27. There's A, B  
11 and C, and instead of an A, at the end of the  
12 page.

13 On page 35, condition of certification  
14 number 37, A, B, C instead of a D. That's the  
15 change.

16 And on page 39, condition of  
17 certification 45, at the top of the page, A,  
18 change that to E.

19 Q With those changes is your testimony --  
20 oh, there's more, I'm sorry.

21 A And on page 48, condition of  
22 certification number 73, delete the last three  
23 lines basically. So the condition will end at in  
24 condition number 71, period, PSD. And the three  
25 following lines would be deleted or struck.

1           Q     With those changes is this testimony  
2     true and correct to the best of your knowledge and  
3     belief?

4           A     Yes, it is.

5           Q     Could you summarize it briefly?

6           A     Yes. My FSA will address the potential  
7     air quality impacts resulting from the criteria  
8     pollutant emissions created by the construction  
9     and operation of the Delta Energy Center Project.  
10           The criteria pollutants are those for  
11     which state and federal standards have been  
12     established.

13           They include NOx dioxide-NO2, sulfur  
14     dioxide-SO2, carbon monoxide-CO, ozone which is  
15     O3, and its precursors NOx dioxides or oxidates,  
16     and volatile organic compounds, VOC.

17           Particulate matter less than 10, 2.5  
18     microns in diameter. We call that PM10 and PM2.5.  
19     And their precursors which are NOx, VOC and SOx.

20           During carrying out these analyses I  
21     evaluated basically the project at three points,  
22     examining the project at three points. Whether  
23     the Delta Energy Center Project is likely to  
24     conform with all applicable federal, state and  
25     local air quality laws, regulations and standards,

1 as required by Title 20, California Code of  
2 Regulations.

3 Number two is whether the Delta Energy  
4 Center is likely to cause any significant air  
5 quality impacts, including new violation of  
6 ambient air quality standards or contributions to  
7 existing violations of these standards as required  
8 by Title 20.

9 The third point I analyzed was whether  
10 the mitigation proposed for the Delta Energy  
11 Center is adequate to lessen the potential impact  
12 to the level of less than significant, as required  
13 by Title 20.

14 And at the conclusion of my examination  
15 the project for the Delta Energy Center does not  
16 violate federal, state or local laws, ordinance or  
17 regulations or standards. And it doesn't  
18 contribute to significant or violate significant  
19 health impact.

20 Q Does that conclude your summary?

21 A Yes.

22 Q Is it your testimony that ozone  
23 emissions decreased in the Bay Area in the 1990s?

24 A Yes, it is. Decreased significantly  
25 because the programmatic approach of the District

1 and California Air Resources Board that includes  
2 reformulated gasoline, rule 9-11, which is Mr.  
3 Rubenstein spoke about that earlier, which is  
4 applicable to PG&E and power plants, which they  
5 are forced to switch from oil or fuel oil to  
6 natural gas.

7 The second reason is rule 9-11, by  
8 itself, is intended to be reduce NOx from the  
9 former PG&E plants by almost 90 percent by year  
10 2005. And as we know that NOx is a precursor to  
11 ozone and PM10, so therefore it is a huge  
12 reduction in the ozone and PM10, as well.

13 Q One of the issues that has arisen in  
14 this case is that there's been some question about  
15 whether Bethel Island is an appropriate measuring  
16 point for PM10 in the case. In your opinion is  
17 that an appropriate measurement station?

18 A It is an appropriate station. The  
19 reason it is appropriate is that it measures PM10  
20 basically. PM10 is formed or the concentrate  
21 would increase during the wintertime versus in the  
22 summertime.

23 Well, the prevailing wind during the  
24 wintertime, it comes from the east to the west.  
25 So that would put path alignment downwind from all

1 the major emitters in the area here, including  
2 Contra Costa County.

3 Also, it were used as the surrogate for  
4 air impacts from PG&E and -- EIR in environmental  
5 impact report. The measurements taken in the  
6 Bethel Island give a very good correlation with  
7 the level of other areas in northern Contra Costa  
8 County, such as Crockett.

9 Measured ozone level in Pittsburg  
10 generally correlate with the measurements with  
11 Bethel Island, so therefore I conclude that Bethel  
12 Island is a good monitoring station for PM10.

13 Q Another issue that arose and has been  
14 addressed is the issue of ammonia. Why does this  
15 project have ammonia emissions?

16 A I think I will go back one step and  
17 explain what's an ammonia slip so everybody will  
18 be clear about that.

19 The applicant is using an SCR, or a  
20 catalyst to try to reduce the NOx emission that  
21 comes out from this project. To do so you have to  
22 inject ammonia in the SCR to oxidize the NOx and  
23 reduce it to make it -- and water.

24 There is some ammonia would not be --  
25 would be excess ammonia, these are the ones that



1 are going to slip out from the stack and we call  
2 this ammonia slip.

3 The issue about ammonia that I think is  
4 very misleading is that everybody believes that  
5 the -- if one pound of ammonia will slip out of  
6 the stack that would be converted to one pound of  
7 PM10. That's why you will hear a lot about that  
8 PM10 is high because the ammonia slips is very  
9 high ppm.

10 The District is imposing ammonia slip  
11 limits of 10 ppm, so you cannot -- any project  
12 that will come in the area cannot emit or they  
13 have to limit their ammonia slip to that level.

14 So, the formation of PM10 from ammonia  
15 is not straightforward. You emit out one pound so  
16 you convert it to one pound. No. There is a lot  
17 of circumstances and a lot of very complex  
18 chemical reactions which take place before you  
19 come to having PM10 in the air from the ammonia.

20 First of all, you have NO2 will come out  
21 from the stack. Now, NO2 will be looking in the  
22 air to scavenge any oxygen to convert that to --  
23 or NO will come out from the stack, I'm sorry,  
24 will scavenge any oxygen to be converted to NO2.

25 NO2 will look for basically Ox, which is

1       hydroxygen to be converted to acid or nitratric  
2       acid. Hydroxygen is available, but it's available  
3       during the early hours of the day versus the rest  
4       of the day basically.

5               So there is another circumstance here  
6       where the action would be more, would be during  
7       the early hours of the day.

8               Now, the ammonia -- the acid, or the  
9       nitratric acid will react now with the ammonia slip  
10      giving some energy or sunlight would be available  
11      to create the ammonia nitrate.

12              So, there is a lot of chemical reactions  
13      will take place before you come from NO to carry  
14      out from the stack down to ammonia nitrate, so  
15      it's not one for one.

16              In the process of getting all these  
17      chemical reaction to take place, there is a lot of  
18      the ammonia been dissolved already, or been  
19      descended simply because the ammonia, by itself,  
20      is not very stable gas. So therefore it has to  
21      stay wet, so to speak. I mean there is a lot of  
22      humidity in the air to hold it as an ammonia.

23              So if it's a hot day, for example, you  
24      will have no humidity, and therefore the ammonia  
25      is not going to be staying in the air for very

1 long. So there is no chance of the ammonia  
2 nitrate to be converted or to be aerated. This is  
3 one thing.

4 The other thing is if you are  
5 mitigating, remember you need two things to create  
6 the ammonia nitrate. You need the NOx, the  
7 nitric acids, and you need the ammonia. If you  
8 are mitigating the NOx from the original, you are  
9 limiting that conversion and that reaction to  
10 start with. Plus the ammonia is very unstable so  
11 therefore the reaction going to happen; yes, it  
12 will happen, but it will happen on a very small,  
13 limited amount of ammonia to NOx.

14 So that reaction is not going to happen  
15 every day -- it's not going to happen as often as  
16 people would like to believe. So that's why I'm  
17 saying that one pound of ammonia is not going to  
18 be converted to one pound of PM10 directly.

19 Q When you say it's not going to be  
20 converted of one pound at a straight-across rate,  
21 are you saying that it's off by a small amount?  
22 By 50 percent? Or by an order of magnitude? What  
23 do you think, what's your opinion?

24 A My opinion is it's a magnitude order.  
25 It's not a small percent. But, again, this amount

1 of reactions is very difficult to quantify. So  
2 therefore I really can't put a number on it. But  
3 there will be a lot of slips and there is a lot of  
4 changes in the air and prevailing wind may be  
5 prevailing in several occasions or in a lot of  
6 occasions. So therefore, I really can't tell you.

7 But in my opinion it's a very small  
8 fraction.

9 Q The FDOC requirement for ammonia slip is  
10 10 ppm.

11 A Yes.

12 Q That is the District's rule for ammonia  
13 slip, is that correct?

14 A Yes, it is.

15 Q This summer CARB released a document  
16 which it has not adopted as formal regulation, but  
17 which it calls a guideline to the districts  
18 concerning gas-fired power plants. And in that  
19 document the guideline for ammonia slip recommends  
20 the districts consider reducing ammonia slip to no  
21 higher than 5 ppm.

22 In this case we are contemplating a  
23 power plant which the District has proposed to  
24 permit at 10 ppm. Do you think we should be  
25 lowering that requirement for ammonia, or do you

1 think it's appropriate as it is now?

2 A I believe it's appropriate as it is now,  
3 and let me tell you why. When ARB created their  
4 guidelines and finalized them last summer, they  
5 were talking basically on their holding average of  
6 three hours for NOx to become -- the concentration  
7 to be 2 ppm.

8 Remember that we are using ammonia to  
9 limit NOx. So if NOx would become 2 ppm, over  
10 three hours average, the averaging time is very  
11 important here, they are limiting the ammonia slip  
12 to 5 ppm, which is reasonable, giving the  
13 averaging time 180 minutes.

14 In this case, which this project  
15 complies with all federal rules and regulations  
16 and District rules and regulations, and ARB's  
17 interpretation of their guidelines, it's 2.5 ppm  
18 NOx over one hour, that's 60 minutes.

19 So, that's very conservative, and it's  
20 very small period of averaging the NOx emissions.  
21 So therefore you will need an additional ammonia  
22 to oxidize the NOx emissions and bring it into  
23 water.

24 So therefore we allow 10 ppm which is  
25 the District rules would allow for, to be able or

1 to be sure that the 2.5 been met. This is one  
2 issue.

3 The other issue is most of the power  
4 plant operates at the size that ammonia slip is  
5 around 2 or 3 ppms anyway. It's in the best  
6 interest, economical best interest to the  
7 applicant to not throw ammonia out in the air.  
8 And the reason for that is they going to drive  
9 their operating costs very high, because they have  
10 to purchase this ammonia, and all of a sudden they  
11 are throwing it in the air.

12 So they have a stick in the fire, they  
13 have a reason to limit the ammonia as well. So  
14 it's from the two sides, from air quality are  
15 limiting it to 2.5 averaging for one hour, whilst  
16 the applicant don't want to spend their money out  
17 of the stack.

18 Q Part of the justification in the CARB  
19 guideline is the fact that several SCR vendors had  
20 provided what they called guarantees of 5 ppm  
21 ammonia slip on a two-hour average, or I'm sorry,  
22 three-hour average, at 2 ppm NOx, is that correct?

23 A Yes.

24 Q That's not what this plant is being  
25 licensed at, though, is that correct?

1           A     That's true.  It's licensed at 2.5 for  
2     one hour with --

3           Q     At 2.5 ppm --

4           A     2.5 ppm for one hour.

5           Q     On a one-hour average.  That means that  
6     the averaging time is going to be much shorter  
7     than the averaging time, three-hour averaging  
8     time, is that correct?

9           A     Yes.

10          Q     How does that make the use of ammonia  
11     different when you have a shorter averaging time?

12          A     Well, you will need to have ammonia  
13     available to insure in that shorter averaging time  
14     that you met the 2.5 and you did not violate it.  
15     So it's more of a security blanket for the  
16     applicant to not violate the 5 ppm by having the  
17     10 ppm available.  But that doesn't mean that he  
18     is going to put 10 ppm up in the air.

19          Q     Okay.  Now in this case the applicant  
20     did not propose to provide PM10 mitigation for the  
21     cooling tower, is that correct?

22          A     According to the District rules the  
23     applicant is not obligated to mitigate PM10 from  
24     cooling towers.

25          Q     Are we requiring it -- is staff

1 recommending that it be required in any case?

2 A Yes, the staff require that PM10, to  
3 fully mitigate the project the cooling tower  
4 emissions, PM10 emissions, must be mitigated, and  
5 the applicant did so.

6 Q And when you say mitigated, you mean  
7 with offsets?

8 A Yes. Provide offsets, and I believe  
9 they provided from Spreckles.

10 Q These are offsets that go beyond those  
11 required by the District, is that correct?

12 A Yes, that's correct.

13 Q Does this project violate any air  
14 quality standard that you know of?

15 A No.

16 Q With the mitigation and the offsets that  
17 we've talked about, does it contribute, in your  
18 opinion, to any -- does it contribute in any  
19 substantial way to an existing air quality  
20 violation?

21 A The answer is no given that the  
22 applicant will comply with all the conditions of  
23 certification.

24 Q With regard to criteria pollutants, does  
25 it expose people to substantial pollution



1 concentrations?

2 A As long as they are mitigated, the  
3 answer is no.

4 Q Does it comply with the District's air  
5 quality management plan?

6 A Yes.

7 MR. RATLIFF: I have no further  
8 questions.

9 HEARING OFFICER GEFTER: Does staff have  
10 a number of exhibits that you wish to identify and  
11 move into evidence?

12 MR. RATLIFF: Yes. And I'm not sure  
13 what order we're going to do it in, but we have  
14 Mr. Badr's testimony. Do you want to do that now  
15 or after cross-examination?

16 HEARING OFFICER GEFTER: Why don't we  
17 identify them and then we'll move them after  
18 cross.

19 MR. RATLIFF: Okay. I thought it was on  
20 the exhibit list -- is it on the list?

21 HEARING OFFICER GEFTER: Yes.

22 MR. RATLIFF: It is.

23 HEARING OFFICER GEFTER: Exhibit 54 is  
24 the final staff assessment, air quality testimony  
25 of Magdy Badr.

1 MR. RATLIFF: And exhibit 55 would be  
2 Mr. Franco's testimony that he's sponsoring.

3 And I think for the Committee's  
4 convenience, I don't know if this is the  
5 appropriate time to mention it, but we would also  
6 ask that the Committee take official notice of  
7 PG&E divestiture EIR, just for the informational  
8 value of that document. I have a copy of it here.

9 HEARING OFFICER GEFTER: Yes, and we  
10 also identified it as exhibit 63. So it would  
11 be --

12 MR. RATLIFF: Okay, great.

13 HEARING OFFICER GEFTER: Also, --

14 MR. RATLIFF: I should also mention that  
15 that is available to anybody on the net. And I  
16 know that some reference has been made to it by  
17 the intervenors, so I think they've probably  
18 already seen it.

19 HEARING OFFICER GEFTER: Other items  
20 that would be sponsored by staff would be the  
21 PDOC, which is exhibit 56 --

22 MR. RATLIFF: The FDOC, yes.

23 HEARING OFFICER GEFTER: The FDOC is  
24 exhibit 58.

25 MR. RATLIFF: Yes.

1 HEARING OFFICER GEFTER: Exhibit 57,  
2 which is the EPA'S letter to BAAQMD offering  
3 comments on the PDOC. We expect that you will  
4 have the witness from the Bay Area speaking about  
5 those items.

6 MR. RATLIFF: Yes, he will sponsor that  
7 testimony, yes.

8 HEARING OFFICER GEFTER: Also, you had  
9 provided another errata to the FDOC.

10 MR. RATLIFF: That was provided by Mr.  
11 Jang to me tonight, and I had copies made and  
12 distributed for all parties.

13 HEARING OFFICER GEFTER: And we'll  
14 identify that as exhibit 73, and that's a letter  
15 from BAAQMD dated November 17th, and, again, the  
16 witness from the Bay Area will testify regarding  
17 that letter.

18 MR. HARRIS: Susan, just a quick point.

19 HEARING OFFICER GEFTER: I understand  
20 that the applicant also failed to move their  
21 exhibits into evidence at the conclusion of your  
22 testimony, Mr Rubenstein, and we'll ask you to do  
23 that, too.

24 MR. HARRIS: It was actually a clerical  
25 issue. There are two number 69's on your document

1 sheet, so --

2 HEARING OFFICER GEFTER: Yes, it's just  
3 a typo, and it's the same item.

4 MR. HARRIS: Right, so the new items, if  
5 you're going to renumber those would have to be  
6 renumbered, as well.

7 HEARING OFFICER GEFTER: It's the same  
8 thing. It's just typed twice, 69 is typed twice.  
9 It's the same item.

10 At this point staff has concluded direct  
11 testimony of Mr. Badr, and you wish to present  
12 direct testimony of Mr. Franco before we go on to  
13 cross-examination?

14 MR. RATLIFF: Yes.

15 HEARING OFFICER GEFTER: Thank you.

16 MR. RATLIFF: The second staff air  
17 quality witness is Mr. Guido Franco. He has not  
18 been sworn.

19 HEARING OFFICER GEFTER: Yes, he was.  
20 Mr. Franco was sworn. And there is also Mr.  
21 Franco's testimony, which is --

22 MR. RATLIFF: His testimony is titled a  
23 modeling assessment of cumulative air quality  
24 impacts for Pittsburg District Energy Facility --

25 HEARING OFFICER GEFTER: And that's

1 identified as exhibit 55.

2 MR. RATLIFF: Right. And I should add  
3 in preface to his testimony, that this document  
4 was prepared for the Pittsburg Delta Energy  
5 Facility proceeding, this proceedings, and was  
6 prepared to consider the cumulative impact of both  
7 of the projects, in addition to possible increased  
8 production at The Southern plants, which are in  
9 this vicinity, one in Pittsburg and one in Contra  
10 Costa -- or in Antioch --

11 HEARING OFFICER GEFTER: And a copy of  
12 exhibit 55 was served on all the parties, is that  
13 correct?

14 MR. RATLIFF: Yes.

15 HEARING OFFICER GEFTER: Would you have  
16 Mr. -- what we failed to do was to identify both  
17 Mr. Badr's and Mr. Franco's positions with staff.

18 MR. RATLIFF: Yes. Could you do that  
19 now, please?

20 MR. BADR: Yes, I'm Magdy Badr. I'm  
21 Associate Mechanical Engineer with the California  
22 Energy Commission. I analyze air quality siting  
23 cases basically for the Commission. I testified  
24 and I prepare testimonies for six cases minimum  
25 for the Commission.

1 HEARING OFFICER GEFTER: Mr. Franco,  
2 could you --

3 MR. FRANCO: My name is Guido Franco. I  
4 am also an Associate Mechanical Engineer with the  
5 Air Quality Unit. My education is in mechanical  
6 engineering. I have a master degree from the  
7 University of California at Berkeley.

8 I have been working in the air quality  
9 area for the last ten years. I am currently  
10 participating as a technical committee of a large  
11 regional study being conducted in California, in  
12 the central California area.

13 HEARING OFFICER GEFTER: And you are a  
14 mechanical engineer at the California Energy  
15 Commission?

16 MR. FRANCO: Yes.

17 DIRECT EXAMINATION

18 BY MR. RATLIFF:

19 Q Mr. Franco, you supervised the  
20 preparation of this document for the Energy  
21 Commission, is that correct?

22 A Yes, I did.

23 Q Were you the contract manager?

24 A Yes, I was.

25 Q Did --

1 HEARING OFFICER GEFTER: You're  
2 referring to exhibit 55

3 MR. RATLIFF: Yes, I am.

4 BY MR. RATLIFF:

5 Q Was this document prepared at your  
6 direction and with your supervision?

7 A Yes, it was.

8 Q Is it true and correct to the best of  
9 your knowledge and belief?

10 A Yes, it is.

11 Q Could you summarize its contents and what  
12 it means from your point of view?

13 A Yeah. We analyzed the cumulative  
14 impacts for both the PDEF Project and the Delta  
15 Project, impacts.

16 I also analyzed the potential impacts  
17 from the existing PG&E power plants, I'm sorry,  
18 the Southern power plants because there was some  
19 concern about the potential cumulative impacts for  
20 the SE power plants. The Southern plants are the  
21 Pittsburg Power Plant and the Contra Costa Power  
22 Plant.

23 So one of the problems in trying to  
24 model an existing source is that their impacts are  
25 already included in the background, in the

1 background measurements that you are taking at the  
2 different monitoring stations. So, we have to be  
3 very careful when we do that.

4 So what we did is to assume that it will  
5 be an increase in emissions from the existing  
6 power plants beyond what has been historically  
7 emitted from these power plants.

8 So we modeled that hypothetical  
9 increment of increasing emissions. And after we  
10 combined those emissions, I mean the modeling  
11 exercise with the emissions from the proposed  
12 power plants, and the end result of the study, the  
13 analysis indicates that there would not be a  
14 significant cumulative impact from the cumulative  
15 impacts on these four power plants.

16 Q Does that complete your summary?

17 A Yes.

18 Q Why did you use the CalPuff model for  
19 this analysis?

20 A The CalPuff model is a more advanced  
21 model that is being proposed by the USEPA as  
22 regulatory model. We felt that we needed to have  
23 a more advanced model to take into account the  
24 three dimensional wind fields in this area, based  
25 on inference to the topography, what it



1 captures.

2 Also, this is the type of model in which  
3 to simulate impacts from sources that are located  
4 relatively speaking far apart. So that's why we  
5 used the CalPuff model.

6 Q You said CalPuff uses a three-  
7 dimensional wind field. Is that true of the ISC  
8 model that is sometimes used?

9 A No. The ISC model uses a one  
10 dimensional wind field as uniform in the entire  
11 domain. That's one of the advantages of the  
12 CalPuff model, that it takes into account that we  
13 have a three-dimensional wind field in practice.

14 Q What were the contributing sources that  
15 you modeled?

16 A Again, I modeled the plants formerly  
17 owned by PG&E, now the Southern power plants.

18 Q Which ones?

19 A The Pittsburg and Contra Costa power  
20 plants. I also modeled the PDEF power plant and  
21 the Delta proposed power plant.

22 Q Did you model the maximum permitted  
23 levels of PM10 and other emissions from both the  
24 Delta project and the PDEF project?

25 A Yes. We assumed the worst case scenario

1       for the proposed power plants, and so we assumed  
2       the maximum permitted level. When in reality the  
3       source test for these sources indicates that the  
4       emissions should be much lower than the permitted  
5       levels.

6               Q       And what assumption did you make for  
7       what are now the Southern plants, the two other  
8       plants that you modeled? What was the assumption  
9       for those emissions?

10              A       We more or less assumed that the  
11       generation will increase almost double from  
12       historical levels from '95 to, I think it's '94 to  
13       '97. And that, in some ways it was also based on  
14       the modeling analysis done, existing modeling  
15       analysis done for the divestiture EIR where they  
16       assumed that in order to make --, what it was at  
17       that time, the power plants, run more, to run  
18       more, what they did was to assume that they were  
19       able to obtain natural gas at a very high low rate  
20       of 25 percent, in comparison with the natural gas  
21       that all the power plants would be able to  
22       get.

23                      So the price assumption for natural gas  
24       for these, when they were the PG&E power plants,  
25       was 25 percent lower than the price for the

1 natural gas for the other competing power plants.

2 Q Is this what PG&E divestiture EIR calls  
3 the analytical maximum scenario?

4 A Yes, and so what we did was to find out  
5 what would be the emissions in 2001, 2002, from  
6 the baseline.

7 Q These were not expected emissions, but  
8 the maximum feasible emissions?

9 A Yeah, they are not expected emissions  
10 because of the assumptions that these power plants  
11 will be able -- I mean what they were there, and  
12 then the PG&E power plants were able to obtain  
13 much less expensive natural gas.

14 Q Could you summarize the results of the  
15 modeling?

16 A Yes, NO2 impacts, I mean we modeled NO2  
17 impacts and PM10 impacts. NO2 impacts, again  
18 assuming the worst case conditions, were always  
19 lower than the most stringent ambient quality  
20 standard.

21 With respect to the PM10 impacts, the  
22 maximum cumulative impact was almost exclusive due  
23 to the Pittsburgh Southern power plant.

24 The PM maximum impacts for all the  
25 sources was made to occur at different locations.

1       They did not overlap.

2                   Another finding was that the maximum  
3       cumulative impacts do occur during the winter.  
4       And it, as has been said before, the highest  
5       ambient quality concentration measured in this  
6       area occurred in the wintertime, so there is a  
7       disconnect between the time of the year when the  
8       highest cumulative impact would occur and the time  
9       of the year when we have a maximum background  
10      concentration in this area --

11           Q       Maximum what?

12           A       Background concentration.

13           Q       Background concentrations.

14           A       I mean, one thing to note is this study  
15      during the summer the PM10 concentration are very  
16      very low.

17           Q       Why did you conclude that the impacts  
18      were not significant?

19           A       Several reasons. I mean, as I said  
20      before, because for NO2 because the worst case  
21      impacts were lower than the more stringent  
22      standard.

23                   For PM10, due to several reasons.  
24      First, the background concentrations in this area  
25      are one of the lowest in California. I have this

1 graph there. This is the average of maximum PM10  
2 concentration from three years, from '95, '96,  
3 '97.

4 HEARING OFFICER GEFTER: Would we have a  
5 copy of this graph?

6 MR. RATLIFF: We'll provide you with  
7 one.

8 MR. FRANCO: So, the red bar is the  
9 Bethel Island --

10 HEARING OFFICER GEFTER: Well, for the  
11 record, because we can't see this in the  
12 transcript, can you describe to us what this graph  
13 shows? It's called average of maximum PM10  
14 concentrations for 1995 to 1997.

15 MR. FRANCO: Yes. So, what it is is for  
16 each, say for Bethel Island, the red bar, the  
17 third bar from the top. This is the -- I took the  
18 maximum concentration measure in 1995, the maximum  
19 concentration measure in 1996, and the maximum  
20 concentration in '97, and I just -- I averaged  
21 these three concentrations.

22 And I also plotted in the graph, the  
23 maximum average concentrations for North Coast,  
24 Sacramento Valley Air Basin, the Mojave Desert,  
25 South Coast, Salton Sea, and unfortunately for

1       some reason I realize that the other, the text for  
2       these are not there.

3               But they represent all the air basins in  
4       California. The one that's next to the -- below  
5       the South Coast bar corresponds to the San Joaquin  
6       Valley Air Basin.

7               So what is important to realize with  
8       this graph is that the concentrations, the red bar  
9       for Bethel Island, is one of the lowest  
10      concentrations in California. The lowest one on  
11      top is the Lake Tahoe, and after that is North  
12      Coast.

13              Okay, --

14              HEARING OFFICER GEFTER: Let me just  
15      clarify for the record. There are 12 bars on this  
16      chart, and the area that you've referred to, the  
17      red bar, is number three on this chart of 12 bars.  
18      And that's at the top of the chart that shows  
19      lower concentrations than the bottom, which is the  
20      Salton Sea, which seems to have the most  
21      concentrations, is that correct?

22              MR. FRANCO: Yes. So I also took into  
23      consideration that the San Francisco Bay Area Air  
24      Basin has an air quality management plan that will  
25      require continued decreases in emissions. NOx

1 emissions, VOC emissions and PM10 emissions are  
2 going to continue going down. So we expect to see  
3 even lower concentration in the future for PM10  
4 and for ozone and for all the criteria pollutants.

5 HEARING OFFICER GEFTER: I'm going to  
6 identify this chart as exhibit 74 for the record.  
7 Because, again, when we look at a document on the  
8 screen, this is being projected, but we don't have  
9 it in the transcript, we need to have a copy in  
10 the record to refer to.

11 So this becomes exhibit 74, and it is  
12 the figure that appears on the screen here. It is  
13 entitled average of maximum PM10 concentrations  
14 1995 to 1997.

15 MR. FRANCO: Yes, as I mentioned before,  
16 the maximum cumulative impact didn't occur during  
17 the wintertime. The maximum cumulative impact, as  
18 submitted by the model. Therefore there is a  
19 disconnect between the maximum background  
20 concentrations and when we expect to have the  
21 maximum cumulative impacts of the sources modeled.

22 And in addition, the impacts of power  
23 plant should be minimal during the winter because  
24 as has been found from several studies, the high  
25 PM10 concentrations in the wintertime are mostly

1       due to ammonium nitrate cumulative problem, and  
2       from the direct PM10 emissions emitted at the  
3       ground level from fireplaces, from automobiles.

4               And elevated sources are not believed to  
5       contribute significantly to the measured high  
6       ambient PM10 concentrations that occur in the  
7       winter.

8               Another reason is that historically PM10  
9       concentration in this area and entire California,  
10      PM10 concentrations have been going down. In the  
11      testimony, in the FSA figure air quality 1, has a  
12      graph showing the PM10 concentrations for  
13      different years, and there's a clear downward  
14      trend for PM10.

15              Another reason is that we used the  
16      Bethel Island as the background concentration for  
17      this area. Now, Bethel Island is actually heavily  
18      influenced by the San Joaquin Valley. And like  
19      this graph shows, the PM10 concentration in the  
20      San Joaquin Valley are much higher, that's the  
21      second from the bottom. So that --

22              HEARING OFFICER GEFTER: It's number 11.  
23      Yes?

24              MR. FRANCO: Yes. So what we expect to  
25      see in the Pittsburg and Antioch area is actually



1 concentrations that will be a little bit -- I mean  
2 concentration lower than the concentration  
3 measured at Bethel Island.

4 One thing that's important to mention, I  
5 consider in my analysis study, there is an  
6 extensive study being conducted in the San Joaquin  
7 Valley that will result in an air quality  
8 management plan that will lower the PM10  
9 concentrations in that area.

10 Again, the influence that the San  
11 Joaquin Valley will have in the Bethel Island and  
12 the Contra Costa area will diminish with time  
13 because the concentrations in the San Joaquin  
14 Valley, PM10 concentrations, will go down.

15 I also considered that there is an  
16 ordinary increase of pollutant for -- I mean a  
17 program in the Bay Area Air Quality Management  
18 District that is aimed to have an no-net increase  
19 of emissions from stationary sources, at least for  
20 the permitted sources.

21 This is the ERC banking program. And  
22 the requirement for new sources to provide  
23 offsets. So, what is going to happen is they're  
24 going to have different locations increasing  
25 emissions due to new power plants or new

1 facilities, and other areas with decreasing  
2 emissions because we have sources that needed to  
3 generate ERCs.

4 For example, here in the City of Antioch  
5 the shutdown of the Owens Broadway Facility  
6 reduced NOx emissions in the order of 215 tons per  
7 year; PM10 emission in the order of 55 tons per  
8 year; and sulfur oxides in the order of 138 tons  
9 per year.

10 So, I mean this emission reductions are  
11 not being used for this project, but what I want  
12 to point out is the basic program to reduce  
13 emissions and to improve air quality for the  
14 entire region. And that some local sources are  
15 being -- I mean there has been a reduction here in  
16 this Antioch area even though it hasn't been used  
17 for this project.

18 Also, I will have to consider that, I  
19 mean there are other programs. For example, the  
20 reformulated gasoline program that the ARB is  
21 proposing. Reformulated gasoline 3 that will  
22 require several things.

23 One of the things that it will require  
24 that will be applicable to the PM10 problem is  
25 that it will almost decrease by half the amount of

1 sulfur in the fuel. And therefore, will reduce  
2 the amount of sulfates that will form in the  
3 atmosphere. Sulfates, as I said, are particulate  
4 matter.

5 I mean they have information about the  
6 existing refineries and there is a rule in the  
7 books in the Bay Area Air Quality Management  
8 District regulations that will require, I think I  
9 believe it's by the year 2001, to reduce,  
10 significantly, the emissions from boilers in these  
11 refineries.

12 Finally, they are -- one addition to the  
13 program is the, I mean ARB's going to promulgate  
14 standards, and there's a standard for heavy duty  
15 vehicles. I mean also that will reduce PM10  
16 concentrations in entire California and in this  
17 area in particular.

18 So, in summary, I mean if you look at  
19 the historical record and the programs that are  
20 being implemented, existing rules that are going  
21 to be implemented in the near future, you look at  
22 the associated cumulative impact analysis, I think  
23 we have to conclude that the end result of the  
24 study, the addition of the two power plants in  
25 this area will not cause a significant increase in

1 pollution.

2 BY MR. RATLIFF:

3 Q Does that complete your summary?

4 A Yes.

5 MR. RATLIFF: The witness is available.

6 HEARING OFFICER GEFTER: Thank you.

7 What I would like you do is have you also present  
8 the direct testimony of the Bay Area witness, and  
9 then you would have a panel to be cross-examined.

10 MR. RATLIFF: Okay. We'll need another  
11 chair, I think.

12 HEARING OFFICER GEFTER: Yes. We'll go  
13 off the record a moment.

14 (Off the record.)

15 HEARING OFFICER GEFTER: We'll proceed  
16 with the testimony of the Bay Area Air Quality  
17 Management District representative, and we'll ask  
18 him to be sworn and identify himself for the  
19 record, please.

20 Whereupon,

21 DENNIS JANG

22 was called as a witness herein and after first  
23 being duly sworn, was examined and testified as  
24 follows:

25 //

1 DIRECT EXAMINATION

2 BY MR. RATLIFF:

3 Q Mr. Jang, could you describe your role  
4 at the District?

5 A I'm a Permit Engineer with the Bay Area  
6 Air Quality Management District, evaluate permits  
7 for stationary sources of air pollution.

8 Q Have you been the District's  
9 representative in this proceeding?

10 A Yes, I have.

11 Q And in the prior Pittsburgh PDEF  
12 proceeding were you also the District's  
13 representative?

14 A Yes, I was.

15 HEARING OFFICER GEFTER: I'm sorry, Mr.  
16 Jang, you didn't introduce yourself by name. So,  
17 let's do that for the record.

18 MR. JANG: Oh, sorry. Dennis Jang.

19 HEARING OFFICER GEFTER: Thank you.

20 MR. RATLIFF: Sorry.

21 BY MR. RATLIFF:

22 Q You supervised the preparation of the  
23 final determination of compliance, is that  
24 correct?

25 A That's correct, I prepared it.

1           Q     Is it true and correct to the best of  
2     your knowledge and belief?

3           A     Yes, it is, with the exception of the  
4     errata.

5           Q     You gave me an errata tonight that --

6           A     Yes.

7           Q     -- I gave to I think everyone.

8                     HEARING OFFICER GEFTER:   And that's  
9     identified as exhibit 73.

10                    MR. RATLIFF:   Okay.

11     BY MR. RATLIFF:

12           Q     Are those changes in the errata so  
13     noteworthy that you need to explain them now, or  
14     should we just move on to your description of the  
15     FDOC?

16           A     I would consider them to be not  
17     significant, typographical errors.

18                    HEARING OFFICER GEFTER:   There was also  
19     another errata that we received earlier, and that  
20     is identified in the exhibit list.

21                    MR. HARRIS:   59, Susan.

22                    HEARING OFFICER GEFTER:   It will be  
23     exhibit 59, which was dated November 1st.

24                    MR. JANG:   Those first two errata I  
25     included on the second submittal --

1 HEARING OFFICER GEFTER: Thank you.

2 MR. JANG: -- that I brought in tonight.

3 BY MR. RATLIFF:

4 Q Can you summarize extremely briefly what  
5 the FDOC is, does, requires? I know you can't go  
6 through the various conditions that you imposed,  
7 but maybe you could describe the purpose of the  
8 final determination of compliance.

9 A Primary purpose is to summarize how the  
10 proposed power plant will comply with the  
11 applicable District, state and federal  
12 regulations.

13 It includes permit conditions to insure  
14 that the facility will comply with those  
15 regulations. And it basically summarizes  
16 compliance issues.

17 Q Did it also include a health risk  
18 assessment concerning toxic air contaminants?

19 A Yes, it did.

20 Q Was that prepared by someone else at the  
21 District, or by yourself?

22 A That was prepared by other persons at  
23 the District.

24 Q I'm sorry, I interrupted your summary,  
25 or had you concluded?

1           A     No. The major findings of the FDOC are  
2           that the Delta Energy Center will comply with the  
3           best available control technology requirements,  
4           and the emission offset requirements of the  
5           District new source review regulation.

6                     The Delta Energy Center complies with  
7           the District toxic risk management policy. The  
8           applicant performed a District-approved health  
9           risk assessment. The results of that assessment  
10          were that the increased health risk to the public  
11          is not significant.

12                    The applicant submitted a PSD air  
13          quality impact analysis which we evaluated. We  
14          found that that was based upon EPA models,  
15          calculation procedures. It was performed in  
16          accordance with our regulations. And it showed  
17          that the Delta Energy Center will not interfere  
18          with the attainment or maintenance of any  
19          applicable ambient air quality standards.

20                    Those are the, in a nutshell basically,  
21          what the findings are.

22           Q     You heard Mr. Rubenstein's and the  
23          staff's testimony earlier tonight about the  
24          District's rule 9-11, which pertains to the  
25          divested PG&E plants?



1           A     Yes, I did.

2           Q     Do you agree with that testimony, is it  
3 accurate?

4           A     Yes.

5           Q     Does the District plan to adopt rules in  
6 the near future concerning the application of that  
7 rule directly to Southern?

8           A     Yeah, the amendments to regulation 9,  
9 rule 11 to address the applicability provisions  
10 are scheduled for calendar year 2000.

11          Q     I see. In terms of the toxic hazard  
12 analysis, since I have you describing the FDOC,  
13 did BAAQMD use the CAPCOA approach risk  
14 assessment?

15          A     Yes, we followed the same guidelines,  
16 CAPCOA guidelines.

17          Q     And what was the determination, the  
18 conclusion concerning that risk assessment?

19          A     That the increased health risk resulting  
20 from the facility is not significant.

21          Q     I'm sorry, can you tell us what CAPCOA  
22 is, for the purposes --

23          A     The California Air Pollution Control  
24 Officers Association. It's a special group that  
25 sets guidelines. In this case they have a

1 committee that sets guidelines for how health risk  
2 assessments are to be performed, and what models  
3 are acceptable and what methods are acceptable.

4 Q Is it your understanding that most  
5 health risk assessments follow the CAPCOA  
6 procedure in California?

7 A Yes, that's my understanding.

8 MR. RATLIFF: I have no further  
9 questions.

10 HEARING OFFICER GEFTER: We're going to  
11 go to cross-examination by the applicant. We can  
12 take a break now and return for cross-examination.  
13 Why don't we take a ten-minute break.

14 (Brief recess.)

15 HEARING OFFICER GEFTER: I'm going to  
16 ask the applicant if you have any cross-  
17 examination of the witness?

18 MR. HARRIS: No, we don't at this time,  
19 thank you.

20 HEARING OFFICER GEFTER: Okay. Before  
21 we go on and ask the intervenors if they have  
22 cross-examination, the Committee has a few  
23 questions of the staff's witnesses. I'd like to  
24 go to those questions now.

25 //

1 EXAMINATION

2 BY HEARING OFFICER GEFTER:

3 Q The first question I have is for Mr.  
4 Badr regarding the testimony, page 19 and 20 of  
5 the testimony, which is exhibit 54.

6 You referred to the concern that staff  
7 had initially that the DEC project would not  
8 include an oxidation catalyst. And I would like  
9 you to talk about that issue and how it has been  
10 resolved, or if it has been resolved.

11 MR. BADR: As my testimony will indicate  
12 that the applicant's not proposing to have a CO  
13 catalyst on this project.

14 However, they are meeting the PM -- the  
15 CO limit that's required by the District. And I  
16 have a copy of that regulation, or the guidelines,  
17 District guidelines in appendix B of my testimony.

18 That will require that the -- the  
19 District will require the applicant to not  
20 increase their CO beyond 10 ppm, or 6 ppm.

21 So, in this case they are complying with  
22 the 10 ppm level, so therefore they will not be in  
23 violation of their guidelines.

24 There's other benefits from the CO  
25 catalyst which is reducing the VOC emissions. The

1 District's rule, again, is very clear on again,  
2 back again to the same attachment, appendix B,  
3 that it needs to reduce the BACT technology, and  
4 the cost effectiveness, as the District said, is  
5 50 percent reduction by weight.

6 And that should be achieved, for the  
7 typical technology to achieve that level is a  
8 catalytic oxidation, which is the same catalyst  
9 we're talking about for CO.

10 The applicant agreed to meet that level  
11 of the 2 ppm for VOC, which complies with  
12 California Air Resources Board's guideline, the  
13 ones that were published in June '99. And also  
14 complies with the District's interpretations of  
15 their own rules and guidelines that that will meet  
16 their BACT determination.

17 So, in spite of the fact that there  
18 won't be any CO catalyst, but the applicant is  
19 still complying with the guidelines in the absence  
20 of the catalyst.

21 HEARING OFFICER GEFTER: Well, how do  
22 you explain your statement at page 20, where you  
23 say that staff has reviewed this issue and  
24 believes the analysis does not justify Calpine/  
25 Bechtel's position?

1                   MR. BADR: Oh, well, that was another  
2                   issue. Basically the applicant was proposing that  
3                   the -- the applicant proposed some analysis to  
4                   show that the CO catalyst will increase PM10  
5                   emissions by two pounds per hour.

6                   We investigated this point. We called  
7                   the manufacturer of the CO catalyst. They  
8                   provided us with a letter which is appendix A in  
9                   my testimony. It's basically saying no, the CO  
10                  catalyst, in general, will not cause increased  
11                  PM10.

12                  So that's where the staff will have  
13                  disagreement with the applicant on that issue.  
14                  But, again, this is something to do with PM10, not  
15                  VOC or CO, which is the catalyst's primary  
16                  function, is to reduce CO and VOC.

17                  HEARING OFFICER GEFTER: Do you have any  
18                  information as to why the applicant is not  
19                  interested in putting a CO catalyst into the power  
20                  plant?

21                  MR. BADR: Well, they are meeting the  
22                  levels of BACT limits without having to have a CO  
23                  catalyst on the project. So perhaps that's a very  
24                  good question for the applicant to comply to, or  
25                  to answer.

1                   HEARING OFFICER GEFTER: Yes. And I  
2 would like to cross-examine Mr. Rubenstein on  
3 that, even though we closed your testimony. We  
4 are now reopening it, and I'd like you to respond  
5 to that question.

6                   MR. RUBENSTEIN: The two principal  
7 reasons why we're not proposing the use of an  
8 oxidation catalyst are number one, we believe that  
9 we are able to achieve the air quality objectives  
10 of the District and the Commission without the use  
11 of that technology.

12                   And second of all, notwithstanding the  
13 technical disagreement we have with the Commission  
14 Staff, we firmly believe that there will be an  
15 adverse environmental impact in the form of high  
16 particulate emission rates, if we were to use that  
17 technology.

18                   On the first point, as Mr. Badr  
19 indicated, and I believe as the District has also  
20 testified, we are complying with the best  
21 available control technology requirements for CO  
22 through compliance with the 10 ppm limit. We do  
23 that without an oxidation catalyst. We are  
24 extremely confident, based on data from similar  
25 plants, that we will be able to meet that limit on

1 an ongoing basis without a CO catalyst.

2 Furthermore, the CO limit of 10 ppm  
3 already results, as I mentioned in my testimony,  
4 in carbon monoxide concentrations that are within  
5 the ambient air quality standard, i.e., they're  
6 safe to breathe already.

7 Consequently, there's no useful purpose,  
8 I believe, that's served by adding that  
9 technology.

10 With respect to hydrocarbon emissions  
11 it's my professional opinion that there are no  
12 data available to support the claim that an  
13 oxidation catalyst would reduce hydrocarbon  
14 emissions by anywhere near 50 percent for this  
15 type of technology.

16 All of the data that have been cited by  
17 the staff and by the State Air Resources Board all  
18 take a look at equipment that uses an oxidation  
19 catalyst and assumes that the low hydrocarbon  
20 levels that are achieved are due to the use of  
21 that technology.

22 The data that I've reviewed indicate  
23 that those low hydrocarbon levels are achieved  
24 from this type of combustion technology, whether  
25 you use an oxidation catalyst or not.

1 HEARING OFFICER GEFTER: I want to ask  
2 staff, are you aware, Mr. Badr, whether the  
3 Commission has certified any projects in the past  
4 which did not include a CO catalyst?

5 MR. BADR: No, I'm not aware of any  
6 project. All projects that come before the  
7 Commission are required the CO, or the applicants  
8 on all the other projects, including Southern,  
9 which is Calpine is an applicant on that project,  
10 voluntarily had the CO catalyst installed or  
11 proposed that the project that be installed.

12 HEARING OFFICER GEFTER: And, Mr.  
13 Rubenstein, are you aware of any power plant  
14 projects of this magnitude that do not have a CO  
15 catalyst installed?

16 MR. RUBENSTEIN: You're referring  
17 specifically to California?

18 HEARING OFFICER GEFTER: In California.

19 MR. RUBENSTEIN: No. In California, no.

20 HEARING OFFICER GEFTER: In other  
21 states?

22 MR. RUBENSTEIN: Yes, Calpine has a  
23 plant in Pasadena, Texas that uses the same basic  
24 technology that we're talking about here. It has  
25 a Westinghouse F Class turbine comparable to the



1 turbines that are proposed here. It includes  
2 selective catalytic reduction and dry low NOx  
3 combustors. It does not include an oxidation  
4 catalyst.

5 And it's data from that plant that I  
6 reviewed that led me to conclude that number one,  
7 we could meet the ten ppm limit. And number two,  
8 we could meet the 2 ppm limit for VOC both without  
9 an oxidation catalyst.

10 HEARING OFFICER GEFTER: How large is  
11 the plant in Texas that you refer to?

12 MR. RUBENSTEIN: I believe that is one  
13 turbine with the rated capacity -- I'm looking for  
14 Mr. Batachi here. I believe that is one turbine  
15 with a total capacity of approximately 300  
16 megawatts. It's roughly one-third, one segment of  
17 the Delta Energy Center.

18 HEARING OFFICER GEFTER: And this is the  
19 only plant that you're aware of that doesn't have  
20 an oxidation catalyst?

21 MR. RUBENSTEIN: Oh, no, there are a  
22 number of others. That's the one that I'm most  
23 personally familiar with in terms of the source  
24 test data.

25 HEARING OFFICER GEFTER: Okay. Is this

1 a recent development in power plant technology not  
2 to include the oxidation catalyst?

3 MR. RUBENSTEIN: In some respects it is.  
4 Not because -- and I think it's almost a matter of  
5 other project developers have proposed it because  
6 they assumed that they would need it.

7 And I think that assumption led to  
8 developers proposing the use of that technology  
9 without actually taking a look at solid  
10 engineering data to see whether they could meet  
11 these kinds of limits without it.

12 HEARING OFFICER GEFTER: Okay, I want to  
13 ask staff, is the applicant were to include the CO  
14 oxidation catalyst technology in this power plant,  
15 what would the benefits be?

16 MR. BADR: Perhaps guaranteeing that the  
17 BACT limits would not be violated. Or perhaps the  
18 emissions, CO emissions would be lower than the 10  
19 ppm. And the VOC would be limited to perhaps 1  
20 ppm. Or not to exceed the 2 ppm as proposed.

21 HEARING OFFICER GEFTER: If, during the  
22 operation of the plant, it is determined that in  
23 fact the project is not meeting the required  
24 limits, would staff at that point recommend the  
25 addition of a CO catalyst?

1                   MR. BADR: The answer to that would be  
2                   yes. And I believe before the Commission will get  
3                   to it, the District will get to it and will  
4                   propose the CO catalyst would be imposed.

5                   HEARING OFFICER GEFTER: Is that  
6                   included in any conditions in the FDOC, Mr. Jang?

7                   MR. BADR: The FDOC would --

8                   HEARING OFFICER GEFTER: No.

9                   MR. JANG: Yes, it is. Permit  
10                  conditions -- basically there's a permit condition  
11                  that requires that the heat recovery steam  
12                  generator and associated duct work be designed  
13                  such that an oxidation catalyst can be installed  
14                  in the future if deemed necessary by the District  
15                  to insure compliance with the CO emission  
16                  limitations.

17                  Yeah, condition 30 on page 35 of the  
18                  FDOC.

19                  MR. HARRIS: Susan, not to question  
20                  that, but will we get some redirect?

21                  HEARING OFFICER GEFTER: Yes, you'll  
22                  have a chance to redirect your witness.

23                  MR. HARRIS: Thank you.

24                  HEARING OFFICER GEFTER: My last  
25                  question to Mr. Rubenstein, will the project

1       comply with condition 30 to allow the installation  
2       of an oxidation catalyst if the District deems  
3       that necessary?

4               MR. RUBENSTEIN:   Absolutely.  I was  
5       going to say before the Commission Staff gets to  
6       this issue and before the District Staff gets to  
7       this issue, Calpine and Bechtel will get to this  
8       issue.  And if the vendor does not meet their  
9       guarantee, we will pursue appropriate remedies,  
10      including, if necessary, installing an oxidation  
11      catalyst.

12             HEARING OFFICER GEFTER:  And when will  
13      that be determined?

14             MR. RUBENSTEIN:  Excuse me?

15             HEARING OFFICER GEFTER:  When will that  
16      be determined?

17             MR. RUBENSTEIN:  That will be determined  
18      during the initial source test upon start-up of  
19      the project.  That's when --

20             HEARING OFFICER GEFTER:  During start-  
21      up?

22             MR. RUBENSTEIN:  Yes.

23             HEARING OFFICER GEFTER:  Prior to  
24      commercial operation?

25             MR. RUBENSTEIN:  Yes.  We will know that

1 prior to commercial operation.

2 HEARING OFFICER GEFTER: Also, I have a  
3 question for Mr. Badr again. At page 19 of your  
4 testimony, the first full paragraph, the second-  
5 to-the-last line where it talks about the use of  
6 dry low NOx burners produces emissions as low as  
7 25 ppm. Is that 25 or 2.5?

8 MR. BADR: No. The amount, the  
9 concentration of NOx comes out from the turbine  
10 before they enter SCR, is at that level. However,  
11 coming out from the SCR it should not exceed the  
12 2.5 ppm.

13 HEARING OFFICER GEFTER: And is that, at  
14 the time, during start-up will the emissions be 25  
15 ppm prior to commercial operation, prior to the  
16 installation of SCR?

17 MR. BADR: It depends on what period of  
18 time you're talking about during the start-up.  
19 During the start-up, it normally takes around  
20 three hours or 180 minutes. In the very first  
21 portion of that I don't think it would be around  
22 25. However, would be controlled as soon as the  
23 SCR comes on line within 25 minutes.

24 And the ammonia injection would be  
25 injected in the SCR and then shortly after that,

1 or at that time the reaction between the ammonia  
2 and the NOx will start, and will start the  
3 function of the SCR and control down to 2.5 ppm.

4 HEARING OFFICER GEFTER: Mr. Rubenstein,  
5 back to the monitoring station, the new monitoring  
6 station that will be installed in a new location.  
7 The proposed conditions say that the data  
8 collection will occur for up to three years after  
9 project operation begins.

10 My question is why is it limited to  
11 three years?

12 MR. RUBENSTEIN: The purpose of the data  
13 collection is to evaluate the existing air quality  
14 prior to construction of either the Pittsburgh  
15 District Energy Facility or the Delta Energy  
16 Center, monitor air quality during construction of  
17 the two facilities, and I thought monitored air  
18 quality for one year after the commencement of  
19 operation of the last facility, which would be a  
20 total of three years.

21 I'm having trouble finding where the  
22 specific condition is. I'm not sure that there's  
23 a condition that's in the final staff assessment  
24 for this proceeding. I think the only condition  
25 at the present time may be the one that's in the

1 decision on Pittsburgh District Energy Facility,  
2 and I don't have that in front of me.

3 MR. BADR: And I would like to add  
4 something to that.

5 HEARING OFFICER GEFTER: Yes.

6 MR. BADR: I think there was a condition  
7 on the Pittsburgh project to require that  
8 insurance, so it's --

9 MR. RUBENSTEIN: Yeah, that's what I  
10 just said.

11 MR. BADR: -- covered somewhere else.

12 MR. RUBENSTEIN: Yes. Did I answer your  
13 question, Ms. Gefter?

14 HEARING OFFICER GEFTER: Yes. Yes, you  
15 explained again why there's a three-year period  
16 and that would be two years prior to commercial  
17 operation and one year past, is that what you  
18 intended?

19 MR. RUBENSTEIN: That was my  
20 understanding. Again, that condition was set in  
21 the PDEF proceeding, and I was not a party to  
22 that.

23 HEARING OFFICER GEFTER: Okay. Do the  
24 parties have any objection to including a similar  
25 condition in this proceeding?

1 MR. RUBENSTEIN: The same condition?

2 No.

3 HEARING OFFICER GEFTER: Okay.

4 MR. HARRIS: Susan, that's exactly the  
5 same condition that's in the PDEF?

6 HEARING OFFICER GEFTER: I'm just asking  
7 whether you would have objection. I am not saying  
8 at this point whether it will be the exact same  
9 condition.

10 MR. HARRIS: Well, that very much  
11 affects our willingness to accept it. If it's  
12 exactly the same, I think we're okay with it.

13 HEARING OFFICER GEFTER: All right,  
14 well, we'll leave that pending.

15 MR. ELLISON: By way of explanation on  
16 that, Ms. Gefter, you're talking about one  
17 facility. We have two different conditions  
18 requiring us to do one thing two different ways.  
19 It doesn't work.

20 HEARING OFFICER GEFTER: I understand  
21 that. Understanding, we've got that.

22 MR. BADR: The condition, the Pittsburgh  
23 project is really to cover the same requirements,  
24 is required for the Delta Energy Facility. So the  
25 function of that monitoring station is not going



1 to change from project to project.

2 HEARING OFFICER GEFTER: Yeah, I  
3 understand that. I'm familiar with that  
4 condition.

5 At this point I'll ask staff if you have  
6 any redirect of your witness.

7 MR. RATLIFF: No.

8 HEARING OFFICER GEFTER: And I would ask  
9 the applicant if you have redirect of your  
10 witness?

11 MR. HARRIS: Yes, just a little bit,  
12 based on the questions. I'm going to go back to  
13 the CO catalyst issue.

14 REDIRECT EXAMINATION

15 BY MR. HARRIS:

16 Q I think, Gary, there was a question  
17 posed about the benefits of the CO catalyst. Can  
18 you talk about both the potential benefits and the  
19 potential burdens associated with the CO catalyst?

20 A In terms of potential benefits I think  
21 that if you were to add a CO catalyst to this  
22 project design you would see a reduction in carbon  
23 monoxide emissions from the current levels  
24 which -- because I said earlier, are already  
25 within the state ambient air quality standard

1       inside the stack to yet lower levels.

2               I don't doubt believe that there would  
3       be any reduction in hydrocarbon emissions from the  
4       facility, because hydrocarbon emissions are  
5       already at the limits of detection, and I base  
6       that conclusion on test data that I've reviewed  
7       from the Pasadena, Texas plant that uses  
8       essentially the same control technology. Does not  
9       have an oxidation catalyst, and has an  
10      undetectable hydrocarbon emissions.

11              With respect to the adverse impacts  
12      there is a small disbenefit in terms of an  
13      increase in fuel consumption due to the back  
14      pressure of the catalyst. That small increase in  
15      fuel consumption does result in a correspondingly  
16      small increase in emissions of all pollutants,  
17      generate the same amount of electricity.

18              And then finally there is the more  
19      substantial disbenefit which is an increase in  
20      particulate emissions of, in my opinion, anywhere  
21      between a half pound per hour up to two pounds per  
22      hour associated with the oxidation of trace  
23      quantities of sulfur, -- natural gas -- sulfates  
24      in the stack.

25              In a different proceeding we will be

1 providing more detailed information on that  
2 because we have -- that issue has come up in other  
3 arenas. And we have just recently received  
4 approval to release source test data to support  
5 that.

6 HEARING OFFICER GEFTER: And different  
7 proceeding, not this proceeding?

8 MR. RUBENSTEIN: Correct.

9 BY MR. HARRIS:

10 Q Now, Gary, would the emission limits  
11 change with the addition of the CO catalyst?

12 A The only emission limits that would  
13 change is I would certainly recommend to Calpine  
14 that we increase the particulate emission limit by  
15 one to two pounds per hour to accommodate the  
16 expected increase in particulate emissions.

17 I would not expect the VOC or the  
18 hydrocarbon emission limit to change. And the CO  
19 limit might change, but it might not. It would  
20 depend on whether the agencies believe that a  
21 change was necessary. And I can't imagine that  
22 they would because they've already concluded that  
23 we satisfy the best available control technology  
24 requirements at a 10 ppm level.

25 Q And, finally, what if Calpine were wrong

1       in this case and they couldn't beat the 10 ppm  
2       emission limits? What would be the result of  
3       that?

4           A     Well, again, Calpine's belief is based  
5       on testing that was performed at the Pasadena,  
6       Texas plant, which showed that that limit was met  
7       by a comfortable margin without an oxidation  
8       catalyst.

9                   If, for some reason, this plant was  
10      different, it's a featured project design, Calpine  
11      and Bechtel are planning to design the facility so  
12      it can accommodate an oxidation catalyst.

13                   And as we discussed earlier, that design  
14      is required by a condition in the final  
15      determination of compliance. And that would  
16      require the catalyst to be installed if, in fact,  
17      we could not meet the limits.

18                   HEARING OFFICER GEFTER: May I ask one  
19      more question. What would be the disadvantages in  
20      your mind for installing the oxidation catalyst at  
21      the outset?

22                   MR. RUBENSTEIN: The increase in  
23      particulate emissions, and given the fact that  
24      we're in an area that exceeds the state ambient  
25      air quality standard for PM10, and given the fact

1       that there is, in my opinion, no benefit with  
2       respect to hydrocarbon emissions. And that there  
3       is a benefit with respect to CO, but our CO level  
4       is already within very safe levels.

5               When I do the environmental balance it's  
6       a very simple conclusion for me to reach that the  
7       environmental disbenefits outweigh any potential  
8       benefits, you might say.

9               HEARING OFFICER GEFTER: Thank you. Is  
10       your redirect complete?

11              MR. HARRIS: Yes, thank you.

12              HEARING OFFICER GEFTER: Thank you.  
13       Would both the applicant and staff like to move  
14       your exhibits into the record at this time, and  
15       then we'll move on to cross-examination by the  
16       intervenors.

17              MR. HARRIS: Yes, we would like to move  
18       in our documents. Let me go down the list, I  
19       guess, for you.

20              Items 43, 44, 45, 46, 47, 48 and 49.  
21       I'm going to move those items into evidence at  
22       this point.

23              HEARING OFFICER GEFTER: Does staff have  
24       any objection to those items being received as  
25       evidence?

1 MR. RATLIFF: No.

2 HEARING OFFICER GEFTER: Do any of the  
3 intervenors have objections?

4 Hearing no objection, the exhibits  
5 enumerated by the applicant are received into  
6 evidence.

7 Does staff want to move your exhibits  
8 into evidence?

9 MR. RATLIFF: Well, I hope I have them  
10 all in hand here. It appears to be exhibit 54,  
11 55, 56, 57, 58, 59, 60, 61, 63, 66.

12 HEARING OFFICER GEFTER: Does the  
13 applicant have any objection to receiving those  
14 documents into the record?

15 MR. RATLIFF: And 74.

16 HEARING OFFICER GEFTER: And 74.

17 MR. HARRIS: Are you saying 73 and 74  
18 are already in?

19 HEARING OFFICER GEFTER: Do you have any  
20 objection to either of those --

21 MR. HARRIS: No, so you'll include those  
22 in --

23 HEARING OFFICER GEFTER: 73 and 74 are  
24 included in the staff's proposed list of exhibits.

25 MR. HARRIS: I think 61 was included,

1 and I believe that's environmental justice.

2 HEARING OFFICER GEFTER: Yes, it is.

3 I'll take that out. 61 is deleted from that list  
4 right now. We're talking just about the air  
5 quality exhibits.

6 I will list them again. The exhibits  
7 that staff proposes to move into evidence, exhibit  
8 54, 55, 56, 57, 58, 59, 60, 63, 66, 73 and 74.  
9 Any objection, applicant?

10 MR. HARRIS: No, no objection, thank  
11 you.

12 HEARING OFFICER GEFTER: Any intervenors  
13 have objections?

14 Hearing no objections those enumerated  
15 exhibits on behalf of staff are now received into  
16 evidence.

17 At this point we will ask the  
18 intervenors if they have cross-examination of  
19 staff's witnesses. And first intervenor would be  
20 CURE. Does CURE have any cross-examination?

21 MS. POOLE: No cross.

22 HEARING OFFICER GEFTER: City of  
23 Antioch.

24 MR. HALL: No questions.

25 HEARING OFFICER GEFTER: City of

1       Pittsburg.

2               MR. JEROME:  No questions.

3               HEARING OFFICER GEFTER:  CAP-IT, do you  
4       have questions of the witnesses?

5               MS. LAGANA:  Yes, I have questions.

6               HEARING OFFICER GEFTER:  Please.

7               MS. LAGANA:  Paulette Lagana with CAP-  
8       IT.

9                       CROSS-EXAMINATION

10       BY MS. LAGANA:

11               Q       This question is directed to Mr. Franco.  
12       Mr. Franco, at the beginning of this process the  
13       data that was collected was from Bethel Island,  
14       Concord, for PM10, is that correct?  I know it was  
15       Bethel Island.

16               MR. RATLIFF:  Do you want to direct it  
17       to the two witnesses, so whichever one is --

18               MS. LAGANA:  Okay, whichever ones, yes.

19               MR. RATLIFF:  -- responsible for that  
20       area could answer.

21               MS. LAGANA:  But since that data has  
22       been collected, the existing air monitoring  
23       station in Pittsburg on West 10th near the new  
24       Southern Energy now collects PM10.

25               So, are you planning to revisit the PM10



1 figures that you've come up with by including, you  
2 know, from going forward, of course, no longer in  
3 this process --

4 MR. FRANCO: Are you talking about after  
5 the --

6 MS. LAGANA: Right. Do you consider  
7 including that data in your -- you know, I don't  
8 know how often you change the graph or update your  
9 information.

10 MR. FRANCO: Yeah, the next time I have  
11 the opportunity to update it, I will do it. Next  
12 time there's a need to update it, I will do it.

13 MS. LAGANA: Okay, so you automatically  
14 receive that data that comes from that particular  
15 monitoring station now that it does collect --

16 MR. FRANCO: Yeah, they are obligated to  
17 send the data to the District and to us. So we  
18 will get the information.

19 MS. LAGANA: Okay. Thank you.

20 HEARING OFFICER GEFTER: Do you have any  
21 other questions?

22 MS. LAGANA: No.

23 HEARING OFFICER GEFTER: All right,  
24 Community Health First. Mr. MacDonald, now I  
25 understand that Mr. Joe Hawkins who represents

1 Community Health First had to leave because he was  
2 ill. Do you want to tell us about that?

3 MR. MacDONALD: Yes, he's definitely not  
4 feeling well. He's been suffering from chemical  
5 exposure problems and the fumes are getting to  
6 him.

7 HEARING OFFICER GEFTER: Okay.

8 MR. MacDONALD: My name is Jim  
9 MacDonald. I am a member of Community Health  
10 First. He has asked me to sit in his chair and on  
11 his behalf --

12 HEARING OFFICER GEFTER: Thank you,  
13 okay, now you have the opportunity to cross-  
14 examine the witnesses on air quality.

15 MR. MacDONALD: Yes, okay. This is  
16 strictly on air quality and this is to the BAAQMD  
17 Staff.

18 HEARING OFFICER GEFTER: Mr. Jang can  
19 testify on behalf of the Air District.

20 MR. MacDONALD: Okay.

21 CROSS-EXAMINATION

22 BY MR. MacDONALD:

23 Q It's my understanding that you were  
24 saying that the Bay Area Air Quality Management  
25 District programs are working, is that correct, in

1 reducing air pollution?

2 MR. BADR: Yes. I'm on the Energy  
3 Commission, yes.

4 HEARING OFFICER GEFTER: Yeah.

5 BY MR. MacDONALD:

6 Q Okay, and that air pollution levels have  
7 been dropping?

8 MR. BADR: The last recent years, yes,  
9 on the whole Bay Area. That's correct, I'm  
10 talking about ozone here.

11 MR. MacDONALD: Okay, I don't know if  
12 this is -- I want to refer to staff's final staff  
13 assessment part two, air quality, Delta Energy  
14 Center application for certification 98-AFC-3.  
15 Page 5.

16 HEARING OFFICER GEFTER: Yes, that's  
17 exhibit 54.

18 MR. MacDONALD: Okay, on page 5 there's  
19 a graph of ozone design values. Since '93 does  
20 that graph show that the levels have been going  
21 up?

22 MR. BADR: Relatively, yes. But, in  
23 general, when you look at the graph from 1970 to  
24 year 2000 that's a 30-year data, you will see,  
25 it's very clear from the graph that there is a

1 down trend in the level of ozone.

2 However, perhaps from 1990 and above  
3 it's almost constant. But it's down compared to  
4 prior years.

5 MR. MacDONALD: Does this graph show  
6 that the ozone design values since approximately  
7 1993 have been going up? Does this graph show  
8 that?

9 MR. BADR: No. '93 is lower than maybe  
10 perhaps '96 or '97 on that graph. But they are  
11 relatively around the same line, so it's basically  
12 held constant.

13 MR. MacDONALD: Okay.

14 MR. BADR: Or there is no significant  
15 changes, let's put it this way.

16 MR. MacDONALD: Okay, but the graph does  
17 indicate --

18 HEARING OFFICER GEFTER: Excuse me, Mr.  
19 MacDonald, he's answered the question.

20 MR. MacDONALD: Okay, that's fine  
21 enough? Okay.

22 And then on the monitoring station in  
23 Concord, where is that located? Could you show  
24 that to us on the map?

25 MR. BADR: I really do not know the

1       exact address but I'm sure the District will  
2       answer that question.

3               HEARING OFFICER GEFTER:   We'll ask Mr.  
4       Jang to answer that question.   Why don't you wait  
5       a let him find the answer.

6               MR. MacDONALD:   Okay.

7               MR. BADR:   Is the question, is the exact  
8       address, like the mailing address, the street  
9       address?

10              HEARING OFFICER GEFTER:   No, I believe  
11       it's the location.   Mr. Jang can answer the  
12       question.

13              MR. JANG:   Yes, on Streith Boulevard in  
14       Concord.

15              MR. MacDONALD:   Can we have that on a  
16       map so that the --

17              HEARING OFFICER GEFTER:   I don't know if  
18       we have a map available of Concord.

19              MR. MacDONALD:   Okay, I am familiar with  
20       that site.   I used to work in that corner.   It's  
21       extremely south of this --

22              HEARING OFFICER GEFTER:   Okay, well, you  
23       don't need to testify about the location.

24              MR. MacDONALD:   Okay, all right, --

25              HEARING OFFICER GEFTER:   You have the

1 answer to your question.

2 MR. MacDONALD: Where does the air flow  
3 from that monitoring station go? The air mass.  
4 Once that air mass is over that monitoring  
5 station, where does it go?

6 MR. BADR: Well, in the general area it  
7 depends on basically what time of the year we're  
8 talking about. The prevailing winds during the  
9 summer are from west to east, and in the winter is  
10 from east to west. So I'm not so sure what time  
11 of the year you are talking about.

12 MR. MacDONALD: Okay, on the west of  
13 east projectory, where does that air mass go after  
14 it leaves the monitoring station in Concord?

15 MR. BADR: More east than Concord.  
16 Farther east of Concord.

17 MR. MacDONALD: Is Pittsburg east of --

18 MR. BADR: In general.

19 MR. MacDONALD: -- that monitoring  
20 station? Or are we north of that monitoring  
21 station?

22 MR. BADR: I really have to look at the  
23 map to look at these directions. I don't  
24 visualize them in my head.

25 HEARING OFFICER GEFTER: The witness

1 doesn't have an answer to that question. Perhaps  
2 Mr. Jang has an answer. Why don't you direct the  
3 question to Mr. Jang.

4 MR. MacDONALD: My understanding that  
5 Bay Area Air Quality Management District has done  
6 an air study and their conclusions are that the  
7 air mass that goes over the Concord station leaves  
8 the Concord station in a southeast direction, is  
9 that your understanding of the data?

10 MR. JANG: The impact analysis was  
11 evaluated by a different person in the District,  
12 Dr. Glen Long, so I can't really speak to these  
13 issues.

14 HEARING OFFICER GEFTER: Thank you.  
15 Neither witness has an answer to your question.

16 MR. MacDONALD: Okay. Second question.  
17 Bay Area Air Quality Management District I think  
18 would probably be most knowledgeable about this.

19 On the Bethel Island monitoring station  
20 how do you take into account the secondary air  
21 mass that comes in through the Petaluma Gap and  
22 mixes with the air flow over the Pittsburg/Antioch  
23 area before it reaches the Bethel Island  
24 monitoring station? How do you take in that  
25 dilution factor?

1                   MR. JANG: Once again, I'm not familiar  
2 with a lot of the monitoring station data, the  
3 wind patterns. That was part of the impact  
4 analysis.

5                   MR. MacDONALD: Can I request at some  
6 point we have that information provided?

7                   HEARING OFFICER GEFTER: Mr. Jang, can  
8 that information be provided to the intervenor?

9                   MR. JANG: Yes, it can.

10                  HEARING OFFICER GEFTER: All right.  
11 Okay, they are able to provide you with that  
12 information.

13                  MR. MacDONALD: Okay. Just a point of  
14 order. Can I testify to a phone call, speaking to  
15 meteorology in Bay Area Air Quality Management,  
16 what they told me? No. Okay.

17                  HEARING OFFICER GEFTER: No, no.

18                  MR. MacDONALD: All right, thank you  
19 very much.

20                  HEARING OFFICER GEFTER: Somebody can  
21 call you as a witness, but you can't testify to  
22 yourself.

23                  MR. MacDONALD: Okay, all right. Thank  
24 you very much, that is all.

25                  HEARING OFFICER GEFTER: Californians



1 for Renewable Energy, you may cross-examine the  
2 witness.

3 MR. BOYD: Okay, thank you. Mike Boyd.

4 CROSS-EXAMINATION

5 BY MR. BOYD:

6 Q Joseph, is that your name?

7 A Guido.

8 Q Okay. I have some questions first about  
9 the modeling assessment on cumulative air quality  
10 impacts, specific questions.

11 This map here that you have on page 3-2,  
12 it looks like a topo map, basically. And it's  
13 showing this square or this rectangle that you  
14 show here, is that the modeling zone that you're  
15 looking at?

16 HEARING OFFICER GEFTER: You're  
17 referring to exhibit 55, and what page are you  
18 talking about?

19 MR. BOYD: 3-2.

20 HEARING OFFICER GEFTER: Page 3-2.

21 MR. FRANCO: The larger area is the area  
22 that was used to estimate the wind fields. The  
23 smaller area is the area that was used with the  
24 CalPuff model to estimate impacts.

25 MR. BOYD: So would you say that this is

1 the approximate impact area of the project?

2 MR. FRANCO: No, we no say that. I  
3 would say that that's the area that we thought  
4 that would be needed to do the analysis.

5 MR. BOYD: Okay, now I refer to page 5-6  
6 in this same exhibit, which is annual average PM  
7 concentrate -- oh, wrong one, sorry. That's the  
8 Pittsburgh one.

9 You didn't do the one specifically for  
10 Delta, did you, for PM10?

11 MR. RATLIFF: There is a nice plat for  
12 Delta, if that's your question.

13 MR. BOYD: Oh, okay, in the back here.  
14 Okay, I've got it.

15 HEARING OFFICER GEFTER: Tell us what  
16 page this is.

17 MR. BOYD: I'll tell you in just one  
18 second. It's on C-12.

19 Now, this area here is, this square that  
20 I cited on -- or the rectangle on 3.2, that's the  
21 same area that you're analyzing here for PM10  
22 emissions, right?

23 MR. FRANCO: Yes, that's correct.

24 MR. BOYD: Okay, now in your opinion  
25 would you say that the PM10 emissions are covering

1           basically 90 percent of he analysis area?

2                   MR. FRANCO: I mean all depends on what  
3           concentrations you want to select.

4                   MR. BOYD: Well, let's say --

5                   MR. FRANCO: No, I mean what I'm trying  
6           to say is that the scale goes from impact of zero  
7           to impact of around 2.2 micrograms per cubic  
8           meter.

9                   MR. BOYD: Okay.

10                   MR. FRANCO: It's a very small -- I mean  
11           there is very small quantities. Depending on how  
12           many you include you would have -- it would seem  
13           that you have a larger and larger -- I mean the  
14           more it seems that you have more, a larger impact  
15           area.

16                   MR. BOYD: Okay. Now, the reason I'm  
17           asking this question is I'm trying to establish  
18           what the impact area is of the emissions.

19                   Okay, --

20                   HEARING OFFICER GEFTER: Is that your  
21           question?

22                   MR. BOYD: And so what would you say,  
23           excluding those that are zero, right, that more  
24           than 90 percent of the area has some impact from  
25           PM10?

1                   MR. FRANCO: I mean the numeric -- this  
2                   is a numerical model, a computer model that gives  
3                   you -- I mean infinite -- give you as an estimate  
4                   in passing infinitesimal small numbers, you know  
5                   what I mean?

6                   MR. BOYD: No, I understand.

7                   MR. FRANCO: So, the --

8                   MR. BOYD: But we're on a scale of zero  
9                   to 2.2 even --

10                  MR. FRANCO: So what --

11                  MR. BOYD: So what I'm asking you is  
12                  everything except zero, about more than 90 percent  
13                  of this analysis then is identified in this figure  
14                  as being impacted at one level or another by PM10,  
15                  correct?

16                  MR. FRANCO: That's correct, but most of  
17                  the impact area is I would say concentrations  
18                  lower than 1 microgram per cubic meter.

19                  MR. BOYD: Okay, so now let's say that -  
20                  -

21                  HEARING OFFICER GEFTER: I'm sorry, the  
22                  witness has answered.

23                  MR. BOYD: I'm going to --

24                  HEARING OFFICER GEFTER: You've asked  
25                  the question, --

1 MR. BOYD: -- ask him another question -  
2 -

3 HEARING OFFICER GEFTER: -- several -- a  
4 new question?

5 MR. BOYD: A new question --

6 HEARING OFFICER GEFTER: Thank you.

7 MR. BOYD: -- on the same figure. Okay,  
8 now assuming that we're not talking about anything  
9 below 1, okay, like you just said, what percentage  
10 of this analysis area would you say was impacted?

11 MR. FRANCO: I would say 10 to 15  
12 percent.

13 MR. BOYD: And the coverage of that,  
14 would you say in this map here I see it going from  
15 this side here all the way to over here. Is that  
16 basically -- I mean I'm not --

17 MR. FRANCO: Yes, from west --

18 MR. BOYD: -- it's showing -- this is  
19 the east/west direction basically, right?

20 MR. FRANCO: Yes.

21 MR. BOYD: And the east/west direction  
22 basically there's the higher levels of the  
23 concentration of PM10, correct?

24 MR. FRANCO: If I remember, the impacts  
25 in this case were below 2.2 micrograms per cubic

1 meter.

2 MR. BOYD: Right.

3 MR. FRANCO: So even though what you say  
4 is correct, the impacts are very small.

5 MR. BOYD: Okay, well, what I'm trying  
6 to do is establish that not the levels, but the  
7 coverage, you understand what I'm saying?

8 MR. FRANCO: Yes.

9 MR. BOYD: How big the impact area is.  
10 Okay, now going back to the other map, if you look  
11 at --

12 HEARING OFFICER GEFTER: Which other  
13 map?

14 MR. BOYD: The map on 3-2, okay. Can  
15 you identify for me what cities or communities are  
16 located on the perimeters of this rectangle? For  
17 example, is this Bay Point here?

18 MR. FRANCO: I don't know.

19 MR. BOYD: Okay, I'm just looking at the  
20 topographical features here, --

21 HEARING OFFICER GEFTER: I'm sorry, the  
22 witness said he didn't know. So move on to  
23 another question.

24 MR. BOYD: Okay, is there anyone else  
25 who could be here that, any of the other staff

1 witnesses that can look at this and tell me  
2 topographically what communities are -- for  
3 example, this topo on this site here, you can see  
4 where this point comes out. Isn't that Bay Point?

5 HEARING OFFICER GEFTER: It doesn't  
6 appear that any witness can answer that question,  
7 let's move on to another question.

8 MR. BOYD: That's fine. So basically  
9 then my last question of you is where's Bethel  
10 Island go on this? And is it even in the analysis  
11 zone? Is the Bethel Island monitoring station  
12 within the analysis zone for this model, and is it  
13 within the impact zone that we identified for  
14 PM10?

15 HEARING OFFICER GEFTER: So you're  
16 asking this question with respect to the page 3-2  
17 and page C-12?

18 MR. BOYD: That's correct.

19 MR. FRANCO: Yeah, I believe Bethel  
20 Island is included in the modeling area.

21 MR. BOYD: It's in the modeling area?

22 MR. FRANCO: I believe so.

23 MR. BOYD: Okay. I would like at some  
24 point if you could provide me a map that shows the  
25 location of specific communities within this model

1       so that we can identify whether or not they are  
2       realistically going to include the impacts from  
3       this project, and --

4               HEARING OFFICER GEFTER:   Okay, staff --  
5       I'm sorry, I'm sorry --

6               MR. BOYD:   -- then I --

7               HEARING OFFICER GEFTER:   -- stop.  Staff  
8       can provide you that information.  Let's move on.

9               MR. BOYD:   Okay, now Concord --

10              HEARING OFFICER GEFTER:   Ask a question.

11              MR. BOYD:   -- last question for you is  
12       the Concord monitoring station.  Is that in this?

13              MR. FRANCO:   I believe it's not included  
14       in the modeling area.

15              MR. BOYD:   Okay, so that answers my  
16       question.  Now, I think I'd like to go to Magdy.

17              Okay, first off, Magdy, you were talking  
18       earlier about the best available control  
19       technology and we were talking earlier with the  
20       applicant and I identified the Haber letter from  
21       EPA.  Are you familiar with this letter?

22              MR. BADR:   Absolutely.

23              MR. BOYD:   Okay.  In that letter they  
24       identified that they thought basically that the  
25       lowest achievable emission rate is what we should



1 be using as opposed to best available control  
2 technology.

3 HEARING OFFICER GEFTER: And that letter  
4 is exhibit 57.

5 MR. BOYD: Exhibit 57. In response to  
6 that, it says in the FDOC that they've accepted a  
7 BACT specification of 2 ppm by volume of VOC.

8 Yet, in the letter from EPA they  
9 identify 1 ppm limit has been achieved in  
10 practice. And even go on to cite a .6 ppm  
11 attainment by a cogen facility in Bakersfield,  
12 California.

13 In your opinion does the proposed 2 ppm  
14 by volume emission meet lowest achievable emission  
15 rate?

16 MR. BADR: EPA, after they wrote that  
17 letter, and we have a discussion with them on  
18 their findings, they agreed the 2 ppm which was  
19 proposed for this application, and they accepted  
20 that as BACT.

21 MR. BOYD: Have you got something in  
22 writing to show that?

23 MR. BADR: My conversation and I believe  
24 the applicant's conversation with Martha Larson  
25 with EPA and Matt Haber, where they accepted that

1 limit, yes.

2 MR. BOYD: Okay. Now, I asked the  
3 author of that letter personally these same  
4 questions and I got a different answer.

5 HEARING OFFICER GEFTER: Excuse me --

6 MR. BOYD: Wait, but what I --

7 HEARING OFFICER GEFTER: You cannot  
8 testify. Just ask a question.

9 MR. BOYD: Okay, I'm going to ask a  
10 question. Do you think it would be advantageous  
11 in the Committee's consideration of this matter to  
12 have this person be a witness?

13 MR. HARRIS: I object to the question.

14 MR. BOYD: It's kind of like we're --

15 HEARING OFFICER GEFTER: Okay, there's a  
16 question, okay, --

17 MR. BOYD: -- going back and forth.  
18 He's saying he said one thing, I'm saying another  
19 thing.

20 HEARING OFFICER GEFTER: There -- I'm  
21 sorry -- sorry, --

22 MR. BOYD: It's hearsay for both of us.

23 HEARING OFFICER GEFTER: -- we're not  
24 arguing.

25 MR. BOYD: Okay.

1 HEARING OFFICER GEFTER: Okay, we're  
2 going to go off the record right now.

3 MR. BOYD: Okay, sorry.

4 HEARING OFFICER GEFTER: Off the record.  
5 (Off the record.)

6 HEARING OFFICER GEFTER: Okay, there was  
7 an objection by Mr. Harris to the question. The  
8 objection is sustained. Please ask another  
9 question.

10 MR. BOYD: Certainly.

11 Okay, did you by any chance get a chance  
12 to review my written testimony?

13 MR. BADR: Yes, I did.

14 MR. BOYD: One of the other issues that  
15 I've raised is the issue of the ammonia slip. And  
16 in your analysis --

17 HEARING OFFICER GEFTER: Okay, that's --  
18 your testimony is exhibit 62.

19 MR. BOYD: Exhibit 62. In your analysis  
20 did you include any other stationary sources for  
21 NOx besides the other power plants? For example,  
22 did you include Posco?

23 MR. BADR: Well, you have to understand  
24 something. When I have a project that's proposed  
25 before this Commission I'm analyzing that project.

1       And I'm analyzing that project and the impact the  
2       emissions coming out from that project.

3               And I'm analyzing only five criteria  
4       pollutants, the one I mentioned in my testimony  
5       earlier. The ammonia slips from this project was  
6       looked at it, from that project.

7               And as I testified earlier that if you  
8       are, well, I'm not going to speculate, but the NOx  
9       from other stationary sources is looked at it as  
10      part of the background, existing background in the  
11      area, in the area where the project is. A normal  
12      analysis would be that we look at the background  
13      and establish what's the maximum level, what's the  
14      worst level. And then you see what's the impact  
15      comes out from that subject project. In our case  
16      is Delta Energy Center.

17              And then you would add basically that  
18      impact and the maximum impact from that project at  
19      their worst case scenario to the worst case  
20      background, and establish a number or establish a  
21      level of impact.

22              And you measure that level of impact to  
23      the state and federal standard and be sure that  
24      they are not being violated.

25              So, any existing facility you are going

1 to suggest my answer to that will be that it's  
2 part of the background that we look at. So any  
3 existing facility that have been emitting for  
4 awhile because they have been in operation for  
5 awhile, they contribute to the existing  
6 background.

7 For me to look back again and reconsider  
8 those ones in my analysis, that would be double  
9 counting. And we don't do that.

10 MR. BOYD: So the answer is no, you did  
11 not consider them?

12 MR. BADR: No, my answer is yes, we did  
13 consider --

14 MR. BOYD: You didn't consider them in  
15 this --

16 HEARING OFFICER GEFTER: Excuse me, off  
17 the record.

18 (Off the record.)

19 MR. BOYD: So my question is you're  
20 stating that yes, it was considered as part of the  
21 ambient analysis.

22 MR. BADR: As part of the background in  
23 the ambient air quality, yes.

24 MR. BOYD: Okay. Sorry. Now, you said  
25 that you don't consider -- it was part of the

1 ambient analysis, but yet you did consider the  
2 Pittsburg facility and a couple other energy  
3 source facilities in your analysis, as well,  
4 didn't you?

5 MR. RATLIFF: I believe that you're  
6 directing that question to Mr. Franco who did that  
7 cumulative analysis.

8 MR. FRANCO: Are you referring to the  
9 cumulative analysis?

10 MR. BOYD: Yes.

11 MR. FRANCO: Yeah, the cumulative impact  
12 analysis we considered the existing Southern --

13 MR. BOYD: Okay, so you did -- that's  
14 fine. Now, another question for you is in your  
15 analysis did you do any analysis of secondary  
16 sources of particulate matter? Did you do any  
17 modeling on that?

18 MR. FRANCO: No.

19 MR. BOYD: For example, this ammonia  
20 slip I was talking about, did you --

21 HEARING OFFICER GEFTER: One question at  
22 a time, please. Let him answer the first  
23 question.

24 MR. FRANCO: No, I did not analyze  
25 secondary PM10 information because is a regional

1       problem, and you have large masses of air that --  
2       I mean there isn't -- you need to have a long time  
3       for the chemical reaction to proceed. So it is  
4       assumed that as long as you offset your project  
5       the secondary information is being mitigated.

6               Also, you have to consider the existence  
7       of a air quality management plan that is requiring  
8       the reduction of NOx emissions to achieve  
9       compliance with the ozone standards, that have a  
10      secondary benefit of also reducing secondary PM10  
11      nitrates.

12             MR. BOYD: Okay, I got another question  
13      for Magdy. Magdy, when you were talking about the  
14      ammonia slip in the formation of PM10, you said  
15      something to the effect that there's certain  
16      conditions where it's formed.

17             And you stated that one of these was --  
18      now, correct me if I'm wrong, I'm posing this as a  
19      statement, but I'm asking a question -- you said  
20      that one of the things you needed was temperature,  
21      it was temperature dependent. And I thought I  
22      heard you say something about it was formed most  
23      often in the warm part of the day. Is that  
24      incorrect?

25             MR. BADR: No.

1                   MR. BOYD:   Okay, would you restate what  
2                   you said about that, what you think the mechanism  
3                   is for the formation of PM10 from the ammonia slip  
4                   in combination with NOx?

5                   MR. BADR:   I'm not so sure the question  
6                   refers to how the mechanics of goes from NO back  
7                   to PM10, --

8                   HEARING OFFICER GEFTER:   So the witness  
9                   does not understand your question.   Are you asking  
10                  for, you know, a physical chemistry question?   Or  
11                  are you specifically asking about --

12                  MR. BOYD:   Right.   I can be more  
13                  specific.   I can be very specific.

14                  HEARING OFFICER GEFTER:   Okay, that's  
15                  what we want, a specific question.

16                  MR. BOYD:   Okay, if you look in my  
17                  testimony I have in here, on page 10, --

18                  HEARING OFFICER GEFTER:   Exhibit 62.

19                  MR. BOYD:   Page 10 of exhibit 62, tell  
20                  me what's wrong with this is what I want to know.

21                  This is my question:   Assuming the worst  
22                  case scenario of 100 percent reaction of the  
23                  ammonia slip with NOx in the morning and in the  
24                  evening during periods of plant start-up and shut-  
25                  down, --



1                   MR. RATLIFF: I'm sorry, could you tell  
2                   us what page that is?

3                   MR. BOYD: Page 10. In the evening  
4                   during periods of plant start-up and shut-down,  
5                   high relative humidity and lower air temperatures,  
6                   the total potential, now we're talking about not  
7                   how much is going to form, but what the total  
8                   potential would be, for PM10 and PM2.5, is given  
9                   by the 357 tons identified in the final  
10                  determination of compliance of ammonia, times 80  
11                  tons of  $\text{NH}_3\text{NO}_3$  per ton mol divided by 17 tons of  
12                   $\text{NH}_3$  per ton mol gives 1681 tons of particulate  
13                  matter.

14                 HEARING OFFICER GEFTER: I think he can  
15                 read this now. What is your question.

16                 MR. BOYD: Now, but what I'm asking is  
17                 assuming this worst case scenario, do you see -- I  
18                 mean I took chemistry in school --

19                 HEARING OFFICER GEFTER: Excuse me, just  
20                 ask the question.

21                 MR. BOYD: -- do you see anything wrong  
22                 with that equation? Or is --

23                 HEARING OFFICER GEFTER: End of the  
24                 question.

25                 MR. BOYD: -- and why is it incorrect,

1 if it's so.

2 HEARING OFFICER GEFTER: End of  
3 question, Mr. Boyd.

4 MR. RATLIFF: I don't intend to object,  
5 but I do want to point out that this question has  
6 been fully answered in Mr. Badr's direct  
7 testimony, at some length, I would add.

8 But if it's helpful I would have him  
9 answer it again, if you so desire.

10 HEARING OFFICER GEFTER: Mr. Badr can  
11 refer to his direct testimony and leave it as his  
12 answer. Would that be your answer?

13 MR. BADR: Yes.

14 HEARING OFFICER GEFTER: That you  
15 answered that question in your direct testimony?

16 MR. BADR: The mechanics of the  
17 reactions, yes, I will refer to my earlier  
18 testimony. However, I would like to add that the  
19 reaction is all the creation of PM10 from ammonia  
20 is NOx limited. That mean put all the ammonia in  
21 the air as much as you want, as long as you are  
22 limiting the NOx, or there would be a very limited  
23 amount of NOx in the air, the creation of PM10 is  
24 not going to take place, because it takes two  
25 substance to create that PM10.

1 HEARING OFFICER GEFTER: Yes, and you  
2 already testified to this.

3 MR. BADR: Yes, ma'am, I did.

4 HEARING OFFICER GEFTER: Okay. Let's  
5 move on to another question. We don't need to  
6 discuss physical chemistry, Mr. Boyd.

7 MR. BOYD: It's not physical chemistry,  
8 it's basic chemistry.

9 HEARING OFFICER GEFTER: Basic  
10 chemistry.

11 MR. BOYD: Now, this is basically my  
12 last question, and it has to do with in the  
13 analysis you did an impact analysis on basically  
14 you talked about things like how much risk of  
15 cancer there was going to be, and I don't know  
16 which of the witnesses was talking about that.  
17 Was that you, Magdy?

18 MR. BADR: I did not look at cancer.  
19 There is another expert witness will testify  
20 tonight, Mr. Ringer would be testifying to that.

21 HEARING OFFICER GEFTER: That's a public  
22 health issue.

23 MR. BOYD: Yeah, okay, that's fine, I  
24 can wait till then.

25 I basically wanted to identify some of

1 the effects on health --

2 HEARING OFFICER GEFTER: That's all  
3 right, the --

4 MR. BOYD: -- of particulate matter.  
5 That's what I was getting at.

6 HEARING OFFICER GEFTER: All right, do  
7 you have any other questions?

8 MR. BOYD: No, that's it, thank you.

9 HEARING OFFICER GEFTER: All right,  
10 thank you.

11 MR. BADR: For the benefit of the  
12 Committee I'd like to add that the staff requested  
13 additional mitigation for PM10 above and beyond  
14 whatever the District was asking for to fully  
15 mitigate the project and be sure that it's fully  
16 offsetted.

17 HEARING OFFICER GEFTER: And that  
18 additional mitigation is included in the proposed  
19 conditions, is that correct?

20 MR. BADR: Yes, the last condition which  
21 is number, I believe, 77. Yes, ma'am, 77.

22 HEARING OFFICER GEFTER: All right,  
23 thank you.

24 Does staff have any redirect of your  
25 witness?

1 MR. RATLIFF: Of the two of them, yes.

2 HEARING OFFICER GEFTER: Yes, please.

3 REDIRECT EXAMINATION

4 BY MR. RATLIFF:

5 Q The first question goes to Mr. Badr.  
6 You were asked in an earlier question about the  
7 PM10 counts at various stations such as Concord.  
8 Is it your impression that PM10 levels in the Bay  
9 Area, the different monitoring stations, are more  
10 or less uniform? Or is there a wide variation?

11 A They are very similar in many ways.  
12 There is no -- there might be an episodes on the  
13 same -- on different days for every monitoring  
14 station, but not necessarily would be radical  
15 changes between one monitor in Concord and one  
16 monitor somewhere else, physically located  
17 somewhere else in the Bay Area, no.

18 But the changes in the level of the  
19 concentration will change; it depends on what day  
20 of the year it is, time of the day, from monitor  
21 to monitor. So there's some changes between  
22 monitors.

23 MR. RATLIFF: You heard the question  
24 addressed, I believe, to Mr. Franco concerning --  
25 I did not understand the question, but it had to

1 do with Petaluma Gap. It was addressed to  
2 Mr. Franco by Mr. MacDonald.

3 Did you understand that question?

4 MR. BADR: I understood that the  
5 question was to the effect that is the monitoring  
6 station located in that area capture all emissions  
7 including the diluted one, come out from somewhere  
8 else. I think that was my understanding of the  
9 question.

10 MR. RATLIFF: So you're not sure you  
11 understand that question? If you don't, I don't  
12 want to ask you to try to answer it, so.

13 MR. BADR: That was my understanding of  
14 the question.

15 MR. RATLIFF: Well, do you want to  
16 answer it then, as you understood it?

17 MR. BADR: If that was the question the  
18 answer is yes, there is a monitoring station down  
19 there and this monitoring station basically  
20 monitored the concentration of the air in this  
21 area, and it doesn't discriminate where this  
22 emissions are coming from. Is coming from east,  
23 west, from the valley, from anywhere. So it just  
24 monitor the concentration of the air at that  
25 particular area.

1                   And perhaps that's a good location since  
2                   the District already choose that location to put  
3                   the monitoring station there. They capture the  
4                   worst emission level or concentration, to be  
5                   indicative to the rest of the District.

6                   MR. RATLIFF: You had a question earlier  
7                   about whether you included Posco in your air  
8                   quality analysis, and you made reference to  
9                   background.

10                  When you talk about background you  
11                  basically, am I correct that you're considering  
12                  the air as it is affected by all emission sources  
13                  that currently exist?

14                  MR. BADR: Actually, yes. And actually  
15                  we look at not just any background, we look at the  
16                  maximum background. So all these emissions, all  
17                  this polluters or facilities are emitting, and  
18                  also we look at different levels throughout the  
19                  year, and then we look at the maximum level was  
20                  emitting at all the air quality was bad, or the  
21                  level of air quality when at its worst case.

22                  And we consider that as the background  
23                  to be conservative. And we also look at the  
24                  facility impact at its maximum operation to be  
25                  extra conservative.

1                   MR. RATLIFF: Mr. Franco, you were  
2                   asked, as a follow up to that question, whether we  
3                   had looked at the two Southern facilities in our  
4                   cumulative impact analysis.

5                   And you said yes. And included in that  
6                   analysis was not only the background, but the  
7                   additional increment of generation that those  
8                   facilities were postulated to be capable of  
9                   producing under the PG&E divestiture, is that  
10                  correct?

11                  MR. FRANCO: That's correct, we only  
12                  model the potential incremental emissions from the  
13                  Southern power plants.

14                  MR. RATLIFF: So was the additional  
15                  increment of a maximum generation scenario that  
16                  was modeled in those?

17                  MR. FRANCO: Yeah, it was -- I mean it  
18                  was just speculated about how much more the  
19                  Southern plants could generate and how much more  
20                  emissions will be emitted from these power plants.  
21                  May not have been captured by the background  
22                  measurements.

23                  MR. RATLIFF: So that was in addition  
24                  to, I mean -- let me start over --

25                  MR. FRANCO: So the very total impact we



1 added worst case background concentrations, plus  
2 the impacts from the new power plants, plus the  
3 impacts from the incremental, potential  
4 incremental emissions from the Southern power  
5 plants.

6 MR. RATLIFF: And by dealing with the  
7 increment you were not double-counting, is that  
8 correct?

9 MR. FRANCO: I wasn't double-counting,  
10 however the analysis conservative and there may be  
11 some double-counting there.

12 MR. RATLIFF: Okay, I have no further  
13 questions.

14 HEARING OFFICER GEFTER: At this point  
15 the intervenors have an opportunity to present  
16 direct testimony.

17 MR. HARRIS: Susan, recross, if I could?

18 HEARING OFFICER GEFTER: You have  
19 recross?

20 MR. HARRIS: Yes, I do, just three  
21 questions.

22 HEARING OFFICER GEFTER: Go ahead.

23 MR. HARRIS: I'll keep it quick. And  
24 it's for Mr. Franco, if I could, please.

25 //

1 RECROSS-EXAMINATION

2 BY MR. HARRIS:

3 Q Referring to figure C-11 in your  
4 testimony, which is exhibit 55, it's on page C-12,  
5 and it's the 24-hour PM10 concentration figures  
6 that the intervenors spoke about. I want to ask  
7 you a couple questions about that.

8                   What is the significance level referred  
9           to in the District and EPA regulations for 24-hour  
10       average PM10 concentrations?

11 MR. FRANCO: They have a regulatory  
12 significant level around 5 micrograms per cubic  
13 meter.

14 MR. HARRIS: Now, if you were to define  
15 the impact zone to be the area where  
16 concentrations were above this significance level,  
17 how large would that impact area be on this map?

18 MR. FRANCO: It would be zero. There is  
19 not an area of here that is having an impact  
20 higher than 5 micrograms per cubic meter.

21 MR. HARRIS: And is this the definition  
22 of impact area the District and EPA modeling  
23 guidelines use?

24 MR. FRANCO: There are different  
25 definitions for modeling impact areas. I'm not

1       sure about the definition for PM10 for modeling  
2       purposes.

3               MR. HARRIS:   Okay, but the impact area,  
4       again, would be zero, is that correct?

5               MR. FRANCO:   If we use 5 microgram per  
6       cubic meter, yes, it would be zero.

7               MR. HARRIS:   Okay, thank you.

8               HEARING OFFICER GEFTER:   Thank you.   No  
9       redirect, right?

10              MR. RATLIFF:   No.

11              HEARING OFFICER GEFTER:   You have now  
12       the opportunity --

13              MR. MacDONALD:   I have a redirect of the  
14       witness.

15              HEARING OFFICER GEFTER:   You don't get  
16       redirect.

17              MR. MacDONALD:   You can't redirect.  
18       He's --

19              HEARING OFFICER GEFTER:   He got recross-  
20       examination.

21              MR. MacDONALD:   Yeah.

22              HEARING OFFICER GEFTER:   You have a  
23       recross-examination question?

24              MR. MacDONALD:   Okay, recross.

25              HEARING OFFICER GEFTER:   One question.

1       Okay, go ahead.

2                   MR. MacDONALD:   Well, actually it's  
3       important and --

4                   HEARING OFFICER GEFTER:   Go ahead, ask  
5       your question.

6                   MR. MacDONALD:   -- there is more than  
7       one question that needs to be asked.   And I do  
8       apologize for taking the time.   But I am concerned  
9       about the health and welfare of this community.

10                  HEARING OFFICER GEFTER:   Please ask your  
11       question.

12                  MR. MacDONALD:   Okay.

13                               RE CROSS-EXAMINATION

14       BY MR. MacDONALD:

15               Q       You misunderstood my --

16                  HEARING OFFICER GEFTER:   Who are you  
17       directing the question to?

18                  MR. MacDONALD:   Okay, my question was if  
19       there is a dilution of the pollution that's being  
20       produced in Pittsburg and Antioch by a secondary  
21       air mass from the Petaluma Gap, which is basically  
22       pristine Pacific air, it's not polluted air, it's  
23       clean air, if it is diluted before it gets to the  
24       monitoring station how do you account for the  
25       pollution, the dilution factor?

1                   HEARING OFFICER GEFTER: Do you  
2 understand the question?

3                   MR. BADR: He wants to account for the  
4 dilution factor, and my answer still stands, that  
5 the monitoring station is located at a certain  
6 physical location and this monitoring, the  
7 concentration in the air at that particular area.  
8 They do not discriminate where the emissions are  
9 coming from.

10                  HEARING OFFICER GEFTER: Thank you.

11                  MR. MacDONALD: So you're saying that  
12 the pollution that is derived here in Pittsburgh  
13 are the ambient pollution that is in Pittsburgh,  
14 even though it may be diluted by pristine Pacific  
15 air through the Petaluma Gap, by the time it gets  
16 to the monitoring station the readings will be  
17 representative of the air in Pittsburgh?

18                  MR. BADR: You are looking at one  
19 direction of the winds, but there is other wind  
20 will carry different emissions coming out from  
21 different sources, from different locations  
22 outside Pittsburgh, and that will also impact the  
23 reading of that particular marker.

24                  So if you are looking just on the  
25 emissions coming out from Pittsburgh, that monitor

1 will be wrong. We have to look at all the  
2 emissions coming out from all different sources,  
3 giving all directions of wind coming to impact the  
4 reading of that particular marker.

5 MR. MacDONALD: Okay. The monitoring  
6 station that's in Pittsburgh, do you consider that  
7 to be -- that's south of the what's now the  
8 Southern PG&E plant, do you consider that to be  
9 representative of the pollution levels in  
10 Pittsburgh?

11 MR. BADR: It is one of them, yes.

12 MR. MacDONALD: Okay, now when you're  
13 doing this analysis, are you supposed to consider  
14 sensitive receptors, the effects on sensor  
15 receptors such as churches, schools, adult ed --

16 MR. HARRIS: Can I object, please.

17 HEARING OFFICER GEFTER: There's an  
18 objection, and I was going to object, as well.  
19 That's a public health question. Let's save that  
20 for public health.

21 MR. HARRIS: The basis -- shall I state  
22 the basis of my objection, too?

23 HEARING OFFICER GEFTER: What's the  
24 basis of your objection?

25 MR. HARRIS: It would be that the

1        recross here has gone beyond the scope of the  
2        cross. We're into new issues.

3                HEARING OFFICER GEFTER: I agree with  
4        that, as well.

5                MR. MacDONALD: All right, okay.

6                HEARING OFFICER GEFTER: Okay, you're --

7                MR. MacDONALD: Okay, I'm sorry for  
8        raising new issues.

9                That's it, thank you very much.

10               HEARING OFFICER GEFTER: You may ask  
11        your questions when we get to the public health  
12        topic.

13               At this point the intervenors have an  
14        opportunity to present direct testimony on air  
15        quality. I understand that Mr. Boyd was going to  
16        present some direct testimony. Do you still  
17        intend to do that, or are you satisfied with your  
18        cross-examination?

19               MR. BOYD: I'm satisfied. The only  
20        testimony I would make is the reason I asked  
21        questions about the specific --

22               MR. HARRIS: Is he providing -- excuse  
23        me, Susan, question.

24               HEARING OFFICER GEFTER: I'm sorry?

25               MR. HARRIS: Is he testifying now, or --

1 HEARING OFFICER GEFTER: No, he's  
2 explaining to us whether he's going to present  
3 some direct testimony. This isn't testimony.

4 MR. BOYD: I only have one direct  
5 testimony and that's that I'm --

6 HEARING OFFICER GEFTER: No, I'm sorry.  
7 You cannot testify. You can ask a witness to  
8 testify.

9 MR. BOYD: Okay, that's --

10 HEARING OFFICER GEFTER: Do you have any  
11 witnesses to bring?

12 MR. BOYD: Do I have any more issues?

13 HEARING OFFICER GEFTER: Do you have any  
14 witnesses that you would like to present?

15 MR. BOYD: Oh, the only other witness I  
16 had was Paulette on air, and basically I wanted  
17 her to talk --

18 HEARING OFFICER GEFTER: Okay, we --

19 MR. BOYD: -- about her data, but I  
20 don't know where the appropriate point is.

21 HEARING OFFICER GEFTER: That is now,  
22 because we're talking about air quality. So if  
23 you want Paulette to introduce the document that  
24 you had proposed -- okay, so Californians for  
25 Renewable Energy is going to call Paulette Lagana



1 as a witness, is that --

2 MR. RATLIFF: I'm sorry, but I believe  
3 this is the Bucket --

4 HEARING OFFICER GEFTER: We're going to  
5 go off the record. Off the record, please.

6 (Off the record.)

7 HEARING OFFICER GEFTER: It turns out  
8 that Ms. Lagana will be testifying on public  
9 health and not on air quality, so at this point we  
10 understand that none of the intervenors have any  
11 witnesses who will provide direct testimony on air  
12 quality.

13 And therefore, we will close the topic  
14 of air quality, and we will go to public health.  
15 Off the record.

16 (Off the record.)

17 HEARING OFFICER GEFTER: We're ready for  
18 the topic of public health and ask the applicant  
19 to please introduce your witness and have the  
20 witness sworn.

21 MR. HARRIS: He was sworn already,  
22 Susan.

23 HEARING OFFICER GEFTER: That's correct.  
24 Okay, would you introduce yourself and give your  
25 background.

1 MR. LOWE: My name is John Lowe.

2 MR. HARRIS: Are you ready to begin,  
3 Susan?

4 HEARING OFFICER GEFTER: Would you ask  
5 the witness to please present your expertise in  
6 the field.

7 MR. HARRIS: Okay. We'll get started.

8 DIRECT EXAMINATION

9 BY MR. HARRIS:

10 Q Go ahead, John, and would you  
11 summarize -- or excuse me, which subject matter  
12 you'll testify on?

13 A I'm speaking on the topic of public  
14 health.

15 Q And can you summarize your  
16 qualifications, please, for us?

17 A Over the past 20 years my work has  
18 involved assessing the potential for adverse  
19 effects to human health associated with chemical  
20 contaminants in the environment.

21 I am currently a risk assessor with the  
22 firm of CH2M Hill. I received my bachelor of  
23 sciences degree in environmental toxicology from  
24 the University of California at Davis in 1979.  
25 And in 1985 I was certified in comprehensive

1 practices in industrial hygiene by the American  
2 Board of Industrial Hygiene.

3 I've led the preparation of numerous  
4 risk assessments for private and government  
5 clients addressing both air quality and waste  
6 management issues.

7 In addition to my role on the Delta  
8 Energy Center Project, I am a Senior Human Health  
9 Risk Assessor for clean up of an industrial  
10 facility in Ohio. I'm the Human Health Risk  
11 Assessor for the Indian Bend Wash South Super Fund  
12 site in Arizona under contract to USEPA Region 9.

13 I am also CH2M Hill's lead risk assessor  
14 for clean up of the McClellan Air Force Base Super  
15 Fund site in Sacramento, California.

16 Q And specifically, John, which documents  
17 are you sponsoring as part of your testimony  
18 today?

19 A I'm sponsoring section 8.6 of the AFC,  
20 responses to CEC data request number 30, and  
21 responses to public health informal data requests  
22 submitted to CEC on May 14, 1999.

23 Q And are you also sponsoring your portion  
24 of the testimony that's part of exhibit 1?

25 A Yes, I am.

1           Q     So your documents then would be your  
2     portion of exhibit 1, the section 8.6 of the AFC  
3     is part of exhibit 2, the responses to CEC data  
4     requests is part of exhibit 6, and the responses  
5     to public health information data is exhibit 10.  
6     And they've all been introduced previously for the  
7     record.

8                     Now, were these documents prepared  
9     either by you or at your direction?

10           A     Yes, they were.

11           Q     And are the facts in those documents  
12     true to the best of your knowledge?

13           A     Yes, they are.

14           Q     Do you have any changes or corrections  
15     to your testimony at this time?

16           A     No, I do not.

17           Q     And you adopt this as your testimony for  
18     this proceeding?

19           A     Yes, I do.

20           Q     Can you give us a brief overview of your  
21     testimony?

22           A     My testimony summarizes the analysis of  
23     potential human health consequences associated  
24     with emissions from the facility.

25                     We performed this analysis using a

1 health risk assessment that's based on  
2 conservative approaches. The results of this  
3 analysis are that there are no significant  
4 increases in human health risks from the facility  
5 emissions.

6 Q So the specific results of your  
7 testimony then are what related to the impacts  
8 again?

9 A They're related to -- first of all,  
10 they're related to excess lifetime cancer risks,  
11 increased cancer burden and evaluation of  
12 potential noncancer health effects.

13 Q Taking a look at cancer risks, John,  
14 what were your findings on cancer risk?

15 A The individual excess lifetime cancer  
16 risk associated with emissions from the facility  
17 was .38 in a million. This value is a third of  
18 the U.S. Environmental Protection Agency's most  
19 conservative cancer risk threshold of 1 in a  
20 million.

21 Q So one-third of that conservative value,  
22 is that correct?

23 A That is correct.

24 Q In terms of cancer burdens what were  
25 your findings, John?

1           A     The cancer burden associated with the  
2           facility emissions was less than one.  
3           Specifically, the value calculated in the risk  
4           assessment was 0.066. This would mean that there  
5           will be no new cancer cases associated with  
6           emissions from the facility.

7                     There will be nothing put into the air  
8           from the facility that would cause one more cancer  
9           case in the surrounding population.

10          Q     Now, as for a noncancer risk what did  
11          your findings produce?

12          A     The risk assessment looked at the  
13          potential for other types of systemic toxic  
14          effects, other than cancer. These include adverse  
15          effects to other organ systems, the respiratory  
16          tract.

17                     And the result of the risk assessment  
18          were that emissions would not result in other  
19          kinds of systemic health effects.

20          Q     Did that risk assessment also take a  
21          look at multiple chemicals?

22          A     That is correct. There's several  
23          chemicals that would be emitted to the air from  
24          the facility, and the risk assessment took into  
25          account the risks from all of those different

1 chemicals, the cumulative risk from all those  
2 different chemicals.

3 Q And is your risk assessment based upon  
4 the lowest exposure rates?

5 A The risk assessment is based on levels  
6 of exposure that are protective of sensitive  
7 individuals, from the most sensitive health  
8 effects. So the risk assessment looks at the  
9 lowest levels of exposure that would be associated  
10 with health effects in humans.

11 Q Now as to how you arrived at these  
12 results, did you use a methodology known as a  
13 maximum exposed individual?

14 A Yes, the maximum exposed individual is  
15 soon to be located at the point of highest air  
16 quality impact associated with the facility  
17 emissions. This individual is located at point of  
18 highest air quality impact for 70 years, 365 days  
19 a year, 24 hours a day.

20 The risks associated with this  
21 hypothetical individual at this point of maximum  
22 impact would not be higher at any other location.  
23 Therefore, the risks are insignificant at this  
24 point of maximum impact for the maximum exposed  
25 individual, they will be insignificant elsewhere.

1                   And as we described earlier, the risks  
2                   associated with emissions from the facility are  
3                   considered insignificant.

4                   Q     Just so I'm clear on this, the modeling  
5                   assumption is that you're at the maximum point of  
6                   impact, you're there for 70 years, you're there  
7                   365 days a year, 24 hours a day?

8                   A     That is correct.

9                   Q     Even though that's humanly impossible?

10                  A     That is correct.

11                  Q     Thank you. Can you give us a brief  
12                  overview of how the risk assessment process goes?

13                  A     The risk assessment involves a four-step  
14                  process. The first step is a hazard  
15                  identification. The second step is an exposure  
16                  assessment. The third step is a dose response  
17                  assessment. And the fourth step is a risk  
18                  characterization.

19                         The hazard identification describes what  
20                         chemicals could be emitted from the facility and  
21                         what are the adverse effects associated with those  
22                         chemicals.

23                         The exposure assessment is performed to  
24                         determine how much people could inhale or ingest  
25                         from the emissions from the facility.



1           The dose response assessment looks at  
2           what are the kinds of adverse effects associated  
3           with different levels of exposure.

4           And the risk characterization combines  
5           the results of the exposure assessment and the  
6           dose response assessment to estimate the resulting  
7           risk to human health.

8           Q     Is the health risk assessment that you  
9           used scientifically accepted methodology?

10          A     The health risk assessment was based on  
11          guidelines developed by CAPCOA, the California Air  
12          Pollution Control Officers Association in  
13          collaboration with the California Air Resources  
14          Board and the Office of Environmental Health  
15          Hazards assessment.

16                It's based on -- it's consistent with  
17          risk assessment methods developed by the U.S.  
18          Environmental Protection Agency. These have wide  
19          scientific acceptance. They've undergone peer  
20          review at the highest levels in the federal  
21          government.

22          Q     You characterized your approach as a  
23          very conservative approach. What factors would go  
24          into making this a conservative approach?

25          A     There's several factors that make the

1       analysis very conservative. The emission  
2       estimates are essentially the maximum emissions  
3       that could be associated with operation of the  
4       facility.

5               Overlaid on these maximum emission rates  
6       are the worst case meteorological conditions. The  
7       combination of the highest emission rates and the  
8       worst case meteorological conditions are combined  
9       in an air dispersion model and are used to  
10       estimate the point of maximum impact.

11              At this point of maximum impact, again,  
12       based on worst case emissions and worst case  
13       weather conditions, we assume that there's an  
14       individual that is located at that maximum impact  
15       point for 70 years, 365 days a year, 24 hours per  
16       day. This is called the maximum exposed  
17       individual.

18              Therefore, the risk assessment is based  
19       on the highest level of exposure that could be  
20       associated with emissions from the facility.

21              Q       Just a couple more questions, John. I  
22       want to take a look at some of the testimony  
23       that's been presented by the intervenors, and  
24       specifically, have you had a chance to review the  
25       testimony that was submitted by Mr. Joe Hawkins?

1           A     Yes, I have.

2           Q     And did that testimony take into  
3           consideration various chemicals that were set  
4           forth in Mr. Hawkins' testimony?

5           A     Yes, it took those into account.

6           Q     And considering Mr. Hawkins' testimony,  
7           the information presented there, does that  
8           information have any effect whatsoever on your  
9           conclusions?

10          A     No, it does not.

11          Q     Turning now to the testimony submitted  
12          by Mr. Boyd. Again, have you had the opportunity  
13          to review Mr. Boyd's testimony?

14          A     Yes, I have.

15          Q     And does that information in any way  
16          affect your basic conclusions?

17          A     No, it does not.

18          Q     And I'm going to talk about one final  
19          issue. There was some discussion at our workshop  
20          on the 8th about the issue of breast cancer. And  
21          I wanted to ask you whether the emissions  
22          associated with a power plant are the type of  
23          emissions that are generally associated with  
24          breast cancer risk?

25          A     The chemicals in the emissions that

1 would come from the facility are not those that  
2 are associated with an increased risk in breast  
3 cancer.

4 Q Thank you. A couple questions to close  
5 out my direct. Have you reviewed the final staff  
6 assessment?

7 A Yes, I have.

8 Q And you've reviewed the conditions of  
9 certification therein?

10 A Yes, I have.

11 Q And you find those conditions  
12 acceptable?

13 A I do.

14 MR. HARRIS: At this point I'd like to  
15 move -- actually, they're all in evidence already,  
16 aren't they? I was going to move my documents,  
17 but they're already in, so I won't do it twice.

18 I'll make the witness available for  
19 cross-examination.

20 HEARING OFFICER GEFTER: Does staff have  
21 cross-examination?

22 MR. RATLIFF: Just a few questions.

23 CROSS-EXAMINATION

24 BY MR. RATLIFF:

25 Q Mr. Lowe, what is the individual's

1 lifetime cancer risk?

2 A I don't understand what you're --

3 Q Okay, --

4 HEARING OFFICER GEFTER: Let's put that  
5 in context.

6 BY MR. RATLIFF:

7 Q What is the average risk that any given  
8 individual might expect to be exposed to over his  
9 lifetime of ever having cancer?

10 A From all sources?

11 Q From all sources.

12 A So you're asking what the typical  
13 lifetime cancer risk from all sources?

14 Q Yes.

15 A The figure historically cited is one in  
16 four. Or 250,000 in a million.

17 Q 250,000 in a million?

18 A Yes.

19 Q Have any agencies attempted to assess  
20 what percentage of that cancer is caused by  
21 environmental or chemical causes?

22 A The statistics I've seen are that  
23 environmental causes are on the order of 1 to 5  
24 percent, all environmental causes.

25 Q What are the other causes?

1           A     I'm sorry, when you're saying other  
2 causes you mean?

3           Q     I mean --

4           A     Other environmental causes, other causes  
5 in general?

6           Q     Other causes other than environmental  
7 causes.

8           A     Well, we're talking about other  
9 environmental causes, it would include things such  
10 as contamination of water, ingestion of  
11 carcinogens in the food supply, as well as  
12 carcinogens in ambient air.

13          Q     Okay.

14                HEARING OFFICER GEFTER: Mr. Ratliff,  
15 was your question to the witness about causes  
16 other than environmental causes that --

17                MR. RATLIFF: Yes, it was.

18                HEARING OFFICER GEFTER: Okay. Do you  
19 want to re-ask the question and have him --  
20 BY MR. RATLIFF:

21          Q     I realize I confused you. My question  
22 to you was what are the causes other than  
23 environmental causes that result in cancer?

24          A     Oh, okay, causes other -- they are  
25 principally lifestyle related, such as diet,

1 tobacco use, alcohol use. And there's a smaller  
2 proportion that's related to occupation.

3 Q Okay. What does maximum available  
4 control technology mean?

5 A I think that's probably something that  
6 Mr. Rubenstein could better answer.

7 Q I guess I missed my opportunity then.  
8 (Laughter.)

9 HEARING OFFICER GEFTER: Well, I believe  
10 you'll have your panel, is that correct?

11 MR. HARRIS: Yeah. Gary, do you want  
12 to?

13 HEARING OFFICER GEFTER: -- on cross-  
14 examination.

15 CROSS-EXAMINATION

16 MR. RUBENSTEIN: The maximum available  
17 control technology is a part of a federal and  
18 soon-to-be-state, regulatory program that involves  
19 the control of toxic air contaminants from a  
20 variety of different types of industrial  
21 facilities. And it's part of the overall air  
22 quality regulatory program.

23 MR. RATLIFF: Is it required based on a  
24 certain level of emissions?

25 MR. RUBENSTEIN: To a certain extent it

1 is. The federal regulations governing MACT, or  
2 maximum available control technology requirements  
3 are generally set on a pollutant-by-pollutant  
4 basis and regulated industry-by-industry. For  
5 individual rules there may be limits that are  
6 based on specific emissions levels.

7 There are no MACT requirements, to my  
8 knowledge, that apply to a facility such as this.

9 MR. RATLIFF: Why is that?

10 MR. RUBENSTEIN: That's because EPA has  
11 not found that this is a particularly high risk  
12 type of an operation that warrants any attention  
13 being paid to the control of toxic air pollutants  
14 outside of the new source review process during  
15 which risk assessment such as that described by  
16 Mr. Lowe has been prepared.

17 MR. RATLIFF: Is it your understanding  
18 that MACT would apply to, for instance, a  
19 refinery?

20 MR. RUBENSTEIN: There are MACT  
21 requirements that apply to certain aspects of  
22 refineries, particularly for example, related to  
23 the transfer of liquid hydrocarbons that contain  
24 benzene.

25 MR. RATLIFF: Okay. While we're on the



1       topic I mean what do the emissions from a  
2       refinery, how do they compare to the emissions  
3       from this project in terms of order of magnitude?

4               MR. RUBENSTEIN:   Well, looking at  
5       organic compounds, which is, I assume, what you're  
6       talking about, the emissions of organic compounds  
7       from this facility, as I mentioned several times,  
8       are literally at or below the limits of detection  
9       inside the stack.

10              And the emissions of organic compounds  
11       at an oil refinery are very definitely detectable;  
12       in fact, they use hydrocarbon meters to detect  
13       leaks from different components.   So there are  
14       several orders of magnitude difference between the  
15       two different types of sources.

16              CROSS-EXAMINATION - Resumed

17       BY MR. RATLIFF:

18              Q       What are the principle pollutants of  
19       concern with power plants?

20              A       The pollutants that were evaluated in  
21       the risk assessment included volatile aromatic  
22       hydrocarbons such as benzene, toluene, xylene,  
23       other volatile organic compounds such as  
24       formaldehyde and acetylaldehyde.   Polycyclic  
25       aromatic hydrocarbons were also evaluated.

1                   And then for emissions from the cooling  
2                   tower, some trace metals were evaluated, including  
3                   arsenic, cadmium, copper and zinc.

4                   MR. RATLIFF: I have no further  
5                   questions.

6                   HEARING OFFICER GEFTER: Do any of the  
7                   intervenors have questions? Please identify  
8                   yourself. Mr. Boyd.

9                   MR. BOYD: I have a few questions.

10                   CROSS-EXAMINATION

11                   BY MR. BOYD:

12                   Q     One is in your analysis did you examine  
13                   the worst case scenario that I've cited in my  
14                   testimony of the 100 percent production of  
15                   secondary particulate matter? Did you use that as  
16                   your worst case scenario, or did you use as a  
17                   worst case scenario the maximum PM10 emission  
18                   that's identified in the FDOC?

19                   MR. HARRIS: Point of clarification.  
20                   Where in your testimony are you referring? I want  
21                   to make sure John has it in front of him so he  
22                   understands the question.

23                   MR. BOYD: On page 10 I think it was.  
24                   Page 10, under the top 10 stationary sources for  
25                   NOx. I talk about the worst case scenario.

1                   MR. HARRIS: I want to make sure my page  
2                   10 may not be the same as yours. I printed it off  
3                   the web. Which -- is it that figure --

4                   MR. BOYD: The one right below the thing  
5                   with the 10 --

6                   MR. HARRIS: It's my page 11, but I got  
7                   you.

8                   MR. LOWE: The impacts associated with  
9                   particulate matter were address as part of the air  
10                  quality impact analysis. I'm going to ask Mr.  
11                  Rubenstein to address that.

12                  MR. RUBENSTEIN: The answer to your  
13                  question is no, we did not, because we could not  
14                  credibly hypothesize your worst case scenario of  
15                  the 100 percent reaction of ammonia slip with NOx  
16                  in mornings and evenings, during periods of plant  
17                  start-up and shut-down, with high relative  
18                  humidity and lower ambient air temperatures going  
19                  on for a year.

20                  So, no, we did not address that.

21                  MR. BOYD: My other question is when you  
22                  were identifying the impact of the site precursor  
23                  pollutions which you are talking about here,  
24                  toxics, air toxics, for example, like toluene and  
25                  benzene, you were mentioning a few of them, when

1       you did your analysis what did you base your  
2       ambient level on? What kind of -- where did you  
3       get your background information from on those  
4       pollutants that you were analyzing?

5               MR. LOWE: The risk assessment for air  
6       toxics was based on dispersion modeling of worst  
7       case emissions from the facility.

8               MR. BOYD: When you did this analysis  
9       would your analysis be in any way affected by the  
10      fact that -- later on when she has an opportunity  
11      to be a witness, she'll bring this information  
12      up -- have you seen the Bucket results?

13              MR. LOWE: Yes, I saw it today.

14              MR. BOYD: Does that -- those elevated  
15      levels of air toxics in any way affect your  
16      analysis?

17              HEARING OFFICER GEFTER: Excuse me, when  
18      you're asking the witness about that particular  
19      document which has not been introduced, that is  
20      exhibit 71. And that will be introduced later by  
21      Ms. Lagana.

22              MR. BOYD: Okay.

23              MR. LOWE: I'm sorry, can you restate  
24      your question, please.

25              MR. BOYD: Did you consider the fact

1       that -- in your analysis did you consider the fact  
2       that we have elevated levels of acetone, MTBE and  
3       toluene and carbonyl sulfide in the area? And  
4       there's a couple others that I didn't mention.

5               MR. LOWE: Yes, for those chemicals that  
6       are the same as what's in emissions from the  
7       facility. I noted that what's estimated to be  
8       worst case concentration from the facility are  
9       thousands times lower than these concentrations  
10      presented in this table.

11             MR. BOYD: They are 1000 times lower?

12             MR. LOWE: Thousands of times lower.

13             MR. BOYD: Okay. My other question is  
14      in my testimony here, which you have there, I'm  
15      identifying on page 12 some of the health effects  
16      of particulate air pollution. And then I follow  
17      on page 15 with a graph that I received from the  
18      NRDC that shows the contribution of particulate  
19      air pollution to mortality.

20             Is there, in your study did you identify  
21      any of the impacts of particulate matter on  
22      mortality --

23             MR. HARRIS: Again, which document are  
24      you referring to within your testimony?

25             MR. BOYD: The testimony dated 11/12 and

1       it's titled --

2                   MR. HARRIS: I'm sorry, but what's -- my  
3       question is what specific part, what page, or  
4       what --

5                   HEARING OFFICER GEFTER: Exhibit 62.

6                   MR. BOYD: Exhibit 62, that's correct.

7                   MR. RATLIFF: Page?

8                   MR. BOYD: Page 15.

9                   MR. HARRIS: Is that the table you're  
10      referring --

11                  MR. BOYD: Yeah, it's a table.

12                  MR. HARRIS: Okay, thank you. Sorry, I  
13      just want to make sure I'm following along.

14                  MR. BOYD: So, I'm just asking you if  
15      you did any analysis on the effects of particulate  
16      matter on mortality?

17                  MR. LOWE: The effects of particulate  
18      matter on mortality were accounted for by the U.S.  
19      Environmental Protection Agency development of its  
20      national ambient air quality standard. And that  
21      standard has been recently revised to account for  
22      new data as late as 1997.

23                  And that national ambient air quality  
24      standard was used in the air quality impact  
25      analysis to evaluate the potential public health

1 impact of particulate matter emissions.

2 MR. BOYD: So, in this table I'm  
3 identifying here, they identify a range of 752 to  
4 1748 estimated annual cardiopulmonary deaths  
5 attributed to particulate air pollution.

6 MR. HARRIS: Where on that chart is  
7 that, I'm sorry. I'm having trouble following  
8 the --

9 MR. BOYD: It's under San Francisco/  
10 Oakland, Cal, it says there.

11 HEARING OFFICER GEFTER: What page?

12 MR. BOYD: On page 15.

13 HEARING OFFICER GEFTER: And what's your  
14 question?

15 MR. BOYD: My question is do you dispute  
16 these figures, or do you think that there's some  
17 truth to it, basically, is what I'm trying to find  
18 out.

19 MR. HARRIS: Can I ask that the question  
20 be rephrased? It's not a yes or no question.

21 MR. BOYD: I'm asking --

22 MR. HARRIS: It's --

23 MR. BOYD: If he agrees with --

24 HEARING OFFICER GEFTER: Yes, I'm going  
25 to go off the record. Off the record.

1 (Off the record.)

2 HEARING OFFICER GEFTER: Please state  
3 your question.

4 MR. BOYD: My question is in my  
5 testimony on page 15 under the metropolitan  
6 statistical area identified as San Francisco/  
7 Oakland, California, the estimated annual  
8 cardiopulmonary deaths attributed to particulate  
9 air pollution is identified in the range of 715 to  
10 1748.

11 Do you agree with this estimate of  
12 mortality associated with particulate matter in  
13 this area?

14 MR. LOWE: Mortality from exposure to  
15 particulate matter was considered in the  
16 development of the national ambient air quality  
17 standard.

18 MR. BOYD: I guess that's his answer.

19 HEARING OFFICER GEFTER: That's his  
20 answer.

21 (Laughter.)

22 MR. HARRIS: I'm certain that's his  
23 answer.

24 HEARING OFFICER GEFTER: Why don't we  
25 move on to another question.



1 MR. BOYD: That's it, that's all I have.

2 HEARING OFFICER GEFTER: You have no  
3 further questions, all right.

4 Mr. MacDonald, do you have questions on  
5 behalf of Community Health First?

6 MR. MacDONALD: No, I do not.

7 HEARING OFFICER GEFTER: Okay, Ms.  
8 Lagana, do you have questions?

9 MS. LAGANA: Yes, I do.

10 HEARING OFFICER GEFTER: Please.

11 MS. LAGANA: Paulette Lagana with CAP-  
12 IT.

13 CROSS-EXAMINATION

14 BY MS. LAGANA:

15 Q Mr. Lowe, were you able to study any  
16 effects that would be given to sensitive receptors  
17 regarding asthma? Sensitive receptors, I assume  
18 you understand that term?

19 A Yes, I do.

20 Q Okay.

21 A The risk assessment considered most  
22 sensitive adverse effects associated with each of  
23 the individual chemicals. To the extent that  
24 respiratory effects were identified as the most  
25 sensitive adverse effect, yes, it was considered.

1           Q     And what were your findings on its  
2     effects on asthma?

3           A     Asthma, which the result is that there  
4     were no systemic health effects associated with  
5     emissions from the facility, this would include  
6     respiratory effects.

7           Q     And are you talking about this facility  
8     in terms of it as a singular as opposed to a  
9     cumulative effect?

10          A     We looked at cumulative effects from all  
11     the emission from the facility.

12          Q     Were you able to look at the statistics  
13     for asthma as it relates to the City of Pittsburgh,  
14     in other words, there are statistics regarding  
15     asthma cases in the City of Pittsburgh.

16                 Were you able to look at that and  
17     analyze those figures regarding your results?

18          A     What I was able to do is analyze the  
19     impact from the maximum emission rate at the point  
20     of maximum impact from the facility, and again  
21     demonstrated no significant systemic health risks.

22          Q     No, I'm not talking about possible  
23     future. I'm talking about there are statistics  
24     for asthma, sensitive receptors with asthma  
25     presently.

1           A     Okay.

2           Q     What would be the impact, or what is the  
3           impact of the emissions from this plant on those  
4           already, if you will, preordained or precursed  
5           with asthma? How would it affect those people who  
6           are in, if you will, in the process of having  
7           asthma?

8           A     I'm not sure I understand.

9           Q     Someone who has asthma. There are a  
10          number of cases in Pittsburgh of sensitive  
11          receptors, actually beyond that there are children  
12          and midlife people, as well as the elderly, who  
13          have respiratory or asthma conditions right now.

14                Have those conditions been taken into an  
15          analysis of what the impact of emissions from this  
16          plant on those presently having asthma?

17                Would it worsen it? Would it not affect  
18          it at all? Have you done that study?

19          A     What the results of the risk assessment  
20          showed that there would be no significant  
21          increases in human health risk from the facility  
22          emissions. So, that's the operative term, no  
23          significant increases.

24                HEARING OFFICER GEFTER: I believe he's  
25          answered the question, Ms. Lagana. Do you have

1 another question?

2 MS. LAGANA: That's good.

3 HEARING OFFICER GEFTER: Okay, thank you  
4 very much.

5 Mr. Boyd, do you have another question?

6 MR. BOYD: Yeah, I had one thing that I  
7 missed.

8 HEARING OFFICER GEFTER: Okay, let's do  
9 that --

10 MR. BOYD: In your analysis, first I  
11 would ask are you aware of Senate Bill 25, which  
12 is chaptered into law now?

13 MR. LOWE: Yes, I've seen it.

14 MR. BOYD: In Senate Bill 25 basically  
15 they've changed the requirements from adults to  
16 children, identifying the impacts on children.

17 If you want me to I'll read the specific  
18 sections. If not, I'll just make my --

19 HEARING OFFICER GEFTER: We don't need  
20 to, but my question regarding SB-25 --

21 MR. BOYD: -- my question -- my  
22 question is --

23 HEARING OFFICER GEFTER: Let me ask a  
24 question, first, --

25 MR. BOYD: Sure.

1 HEARING OFFICER GEFTER: -- about SB-25.  
2 Is this the statutes chaptered 1999 or 2000? It's  
3 chaptered 1999, is that right?

4 PRESIDING MEMBER KEESE: Right.

5 MR. HARRIS: I don't know the effective  
6 date, I can tell you if you'll hang on just a  
7 second.

8 MR. BOYD: It says on the top filed with  
9 the Secretary of State October 10, 1999.

10 HEARING OFFICER GEFTER: 1999. It goes  
11 into effect in January 2000?

12 MR. BOYD: That's correct.

13 HEARING OFFICER GEFTER: All right. Go  
14 ahead and ask your question.

15 MR. BOYD: So my question is in your  
16 analysis did you consider the impacts on children,  
17 or did you base your analysis on adults?

18 MR. LOWE: The analysis of the impacts  
19 was based on considered sensitive receptors, the  
20 most sensitive adverse effects and considered  
21 sensitive-- so the answer would be yes, it  
22 considers sensitive receptors such as children.

23 MR. BOYD: Okay.

24 HEARING OFFICER GEFTER: Does the  
25 applicant have any redirect of your witness?

1                   MR. HARRIS: I think I'm fine, no  
2                   questions.

3                   HEARING OFFICER GEFTER: Do you want to  
4                   move your exhibits?

5                   All of them were in except perhaps  
6                   section 8.2, is it, of the AFC?

7                   MR. HARRIS: Right, that portion of the  
8                   AFC I think is not in.

9                   HEARING OFFICER GEFTER: Yes.

10                  MR. HARRIS: And we're going to move the  
11                  entire AFC at the end of the night, so if it's  
12                  appropriate we'll move that section of the AFC  
13                  now.

14                  HEARING OFFICER GEFTER: I don't --

15                  MR. HARRIS: 8.6.

16                  HEARING OFFICER GEFTER: Okay. Any  
17                  objection to moving that section into evidence?  
18                  No objection, that section of the AFC is moved in.  
19                  That's part of exhibit 2. And the applicant will  
20                  later move the entire exhibit into the record.

21                  At this point staff may present your  
22                  direct testimony on public health.

23                  MR. RATLIFF: The staff witness is Mike  
24                  Ringer. I think he needs to be sworn. Oh, he's  
25                  been previously sworn, I'm sorry.

1                   HEARING OFFICER GEFTER: Mr. Ringer was  
2                   previously sworn at an earlier hearing.  
3                   Whereupon,

4                   MIKE RINGER  
5                   was recalled as a witness herein, and having been  
6                   previously duly sworn, was examined and testified  
7                   further as follows:

8                   HEARING OFFICER GEFTER: Would you  
9                   please reiterate your position with the staff?

10                  MR. RINGER: Yes, my name is Mike  
11                  Ringer. I'm a Health and Safety Specialist with  
12                  the Energy Commission in the Environmental Office.  
13                  I've been in that capacity for about ten years.  
14                  I've done a number of studies of power plants in  
15                  the area of toxic risk analysis, and presented  
16                  expert witness testimony in a number of cases.

17                  DIRECT EXAMINATION

18                  BY MR. RATLIFF:

19                  Q     Mr. Ringer, did you prepare the portion  
20                  of the staff's final staff assessment entitled  
21                  public health?

22                  A     Yes.

23                  Q     Do you have any changes to make in that  
24                  testimony?

25                  A     I do not.

1           Q     Is it true and correct to the best of  
2 your knowledge and belief?

3           A     It is.

4           Q     Can you summarize it at this point?

5           A     Yes. I looked at the toxic emissions  
6 from the plant and their relation to potential  
7 changes in public health. And the toxic air  
8 contaminants have been discussed before. They are  
9 noncriteria pollutants because no ambient air  
10 quality standards have been set for them.

11                     Because of this the health risk  
12 assessment process is used to determine whether or  
13 not they're potential impacts. And the health  
14 risk assessment procedure very briefly is to  
15 identify the hazardous substances that could be  
16 emitted from the project, estimating ambient  
17 concentrations of these substances, taking a look  
18 at the exposure levels to affected populations,  
19 and then trying to determine what the health risks  
20 would be to people who would be exposed to these  
21 toxic pollutants.

22                     The health risk assessment is  
23 conservative in that it tries to -- it's biased  
24 towards protection of public health. It uses  
25 worst case assumptions such as the highest levels



1 of pollutants emitted from the plant, weather  
2 conditions that would result in highest ambient  
3 concentration, computer models which result in the  
4 highest impacts, calculating health risks to the  
5 maximum exposed individual, using health based  
6 standards designed to protect the most sensitive  
7 members of the population, including the young and  
8 elderly, those with existing diseases. And  
9 assuming that an individual's exposure to cancer-  
10 causing agents occurs for 70 years.

11 Pathways that are included in the risk  
12 assessment, besides inhalation, for some  
13 substances there are non-inhalation pathways which  
14 have to be included. These include soil  
15 ingestion, dermal exposure and the mothers' milk  
16 pathway.

17 The major categories of health impacts  
18 examined were short-term health effects that are  
19 noncancer, long-term noncancer health effects and  
20 changes in cancer rates.

21 The method that was used is consistent  
22 with guidelines that are put out by the California  
23 Air Pollution Control Officers Association. And  
24 the health risk assessment basically found that  
25 for cancer the increased risk to any maximally

1 exposed individual is .38 in a million. And for  
2 acute and chronic noncancer the hazard indices are  
3 less than 1, which is the significance level  
4 there.

5 As the applicant pointed out, there are  
6 only a fraction, that's .058 for acute, and .035  
7 for chronic noncancer effects. And these compare  
8 to a significance level of 1. So they're a  
9 fraction of the safe level.

10 I looked at cumulative impacts of this  
11 project. And I looked at impacts from Dow  
12 Chemical, from Pittsburg District Energy Facility,  
13 and from this facility, as well, combined with  
14 those two.

15 The way I did this was look at the point  
16 of maximum impact for each of those three  
17 facilities, and none of them overlap at the point  
18 of maximum impact. So, they're really not  
19 additive from that standpoint. So there's no  
20 cumulative -- the cumulative effect is also  
21 insignificant.

22 I should point out that the cancer risk  
23 due to this facility of less than one in a  
24 million, I consider that a de minimis effect, one  
25 that is so small as to be effectively no risk.

1       That is the cancer rate, the background cancer  
2       rate would be the same with or without this  
3       project.

4               And that, in all probability, no one  
5       will contract cancer in the 70 years in their  
6       lifetime, if they were even at the point of  
7       maximum impact from this.

8               Also, by way of looking at cumulative  
9       emissions, cumulative impacts for this project, I  
10      looked at background toxic emissions. And the Bay  
11      Area Air Quality Management District has a series  
12      of 17 toxic monitors located throughout the  
13      District. And by looking at the concentrations of  
14      each of those and comparing those to the  
15      concentrations of the monitor in Antioch, it turns  
16      out that the pollutants of most concern, the  
17      benzene and formaldehyde from about 1993 to 1997  
18      the Antioch levels are no higher in general than  
19      the rest of the Bay Area.

20              There is one, carbon tetrachloride,  
21      which is a little bit less important than the  
22      other two that I mentioned that is a little bit  
23      higher in Antioch than in the rest of the area.

24              And I should also mention that the  
25      benzene and formaldehyde, the primary source of

1       those are mobile emissions. And that the power  
2       plant, again all the chemicals put together result  
3       in risk of less than one in a million.

4               So I determined that there was no  
5       significant impact for any of the health risks  
6       that I looked at.

7               That concludes my testimony.

8               Q     Mr. Ringer, has the District monitored  
9       toxic air contaminants for a number of years?

10              A     Yes.

11              Q     And have they basically calculated the  
12       cancer risk for the Bay Area over those years?

13              A     It's every year that they monitor  
14       toxics, they take the average for the Bay Area for  
15       a number of chemicals, I believe it's about 13  
16       chemicals. And they estimate what the cancer risk  
17       would be, the inhalation risk from those chemicals  
18       alone.

19                   And in about 1993 to 1997 that risk from  
20       inhalation has decreased by about 40 percent. And  
21       this is due primarily to the clean fuels  
22       initiatives that are going on, also to some extent  
23       from some of the controls that are being put on  
24       other types of industry.

25                   Right now it's something less than 200

1 in a million overall risk of cancer from  
2 inhalation. And years ago it was above 500, or  
3 right around 500. So there's a downward trend in  
4 the overall risk from inhalation of toxic  
5 chemicals.

6 Q At one of the workshops one of the  
7 questions raised was how this project might affect  
8 breast cancer locally. Did you think about that  
9 and come to any conclusions?

10 A Yes. Some of the major risk factors for  
11 breast cancer have to do with personal lifestyle,  
12 including at what age the first child was born,  
13 and factors which relate to the number of  
14 children, such as educational level, income level,  
15 things like that.

16 And it turns out that there's really not  
17 too much correlation between levels of  
18 environmental contaminants and breast cancer rates  
19 that really has to do with the level of  
20 circulating steroid hormones, which have nothing  
21 to do with this plant in particular.

22 And I might add further I don't have  
23 particular data on breast cancer in Contra Costa  
24 County, but there was a study done that indicates  
25 that Contra Costa County does not have higher male

1 or female cancer rates of all types for white,  
2 black or Asians compared to the rest of  
3 California. But it does have slightly elevated  
4 cancers in the Latino population.

5 Q Your testimony concerning the risks that  
6 you've been using what you call the conservative  
7 analysis of CAPCOA, that the actual risk of cancer  
8 from this project is less than 1 in a million.

9 A Calculated risk.

10 Q And that's for the maximum exposed  
11 individual?

12 A Yes. That's for the -- that has been  
13 calculated through the models to have the highest  
14 concentration of pollutants over the course of a  
15 year. So we assume that somebody is exposed at  
16 that particular spot for a continuous period of 70  
17 years.

18 Q Does that mean that one person will get  
19 cancer as a result of this project?

20 A No. There's two ways to look at that.  
21 The first is that even if one person were at that  
22 spot for 70 years it's unlikely that they would  
23 get cancer. And since every other spot the  
24 calculated risk would be less than that, that's  
25 highly unlikely that anybody at any spot who would

1 be exposed to any of the pollutants from this  
2 plant would get cancer as a result of this plant's  
3 operation.

4 Q Are you saying effectively that whether  
5 someone gets cancer or not is not affect by this  
6 project?

7 A This project would have no effect one  
8 way or another on the overall cancer rates of any  
9 individual.

10 MR. RATLIFF: I have no other questions.

11 HEARING OFFICER GEFTER: Cross-  
12 examination by the applicant.

13 MR. HARRIS: Can I have a minute?

14 HEARING OFFICER GEFTER: While the  
15 applicant is preparing their cross-examination I  
16 have a question. Let's go on with that.

17 EXAMINATION

18 HEARING OFFICER GEFTER: This is  
19 regarding the condition, public health condition  
20 number 1, which states that the years five and 15  
21 of project operation, the project owner will  
22 perform a source test of the PM10 emissions rate  
23 from the cooling tower.

24 And the question is, why just in years  
25 five and 15? Why not on a continuous basis, or

1       why not every three years? How did you come to  
2       this particular timeframe?

3               MR. RINGER: Okay, yes. The condition  
4       states that the CPM may require the project owner  
5       to do that. The cooling tower drift eliminator is  
6       basically, as I understand it, a series of -- it's  
7       a plastic device that's basically sort of a  
8       passive device. So the following inspections have  
9       to be done on an annual basis to make sure that  
10      all the pieces are there, that they're not broken  
11      or anything.

12             I don't think that there's any reason to  
13      expect that the efficiency would drop, and  
14      therefore it would be unnecessary to do every  
15      year. But for some reason anybody thought that  
16      there was reason to do this, and that's why the  
17      five and 15.

18             And I believe that that's the same  
19      condition or similar condition was in the  
20      Pittsburg project, and the applicant agreed that a  
21      similar condition would be appropriate here.

22             HEARING OFFICER GEFTER: Does staff  
23      agree with that timeframe, or would you see a  
24      different timeframe?

25             MR. RINGER: I have no problems with



1       this timeframe.

2                   HEARING OFFICER GEFTER:   Regarding the  
3       Bay Area's air toxics hot-spots program, which is  
4       referred to in your cumulative impacts analysis.  
5       Could you explain what that program is?

6                   MR. RINGER:   The hot-spots program is a  
7       program which looks at all the facilities that  
8       emit toxic pollutants and requires basically  
9       certain facilities to do risk assessments based on  
10      the amount of chemical and the types of chemical  
11      that are removed from each facility.

12                   The point of the program is to try to  
13      calculate the risk from the facilities and to rank  
14      them in order, and if necessary, those facilities  
15      with higher risks could be subject to trying to  
16      ratchet down the emissions, and to lower the risks  
17      associated with them.

18                   The program, over the past several  
19      years, has been successful in that there's a  
20      couple of different categories of risk, and at  
21      this point I think there's only two facilities in  
22      the entire Bay Area that have risks above 10 in a  
23      million.

24                   And as part of that includes the  
25      monitoring which I spoke of.

1 HEARING OFFICER GEFTER: You had  
2 mentioned 17 toxic monitors throughout the  
3 District?

4 MR. RINGER: Yes.

5 HEARING OFFICER GEFTER: And all 17 are  
6 functioning at this time?

7 MR. RINGER: Correct.

8 HEARING OFFICER GEFTER: There's also a  
9 statement in the second-to-last paragraph  
10 regarding lifetime cancer risk for inhalation of  
11 ambient air is 194 in one million based on 1997  
12 average toxic concentration data of BAAQMD.

13 What does that refer to?

14 MR. RINGER: Each of the chemicals that  
15 are monitoring by these stations, they took the  
16 averages of all the different stations and then by  
17 getting an average concentration for each  
18 chemical, with the associated risk factor for  
19 cancer, you can derive the cumulative risk, the  
20 average risk of somebody breathing in the mixture  
21 of chemicals.

22 And the 194 in one million represents  
23 the ambient air, the risk of breathing the ambient  
24 air over a lifetime.

25 HEARING OFFICER GEFTER: Cross-

1 examination by applicant?

2 MR. HARRIS: Mike scored a perfect 10  
3 over here, so we have no more questions.

4 (Laughter.)

5 MR. RINGER: Ten in a million?

6 (Laughter.)

7 HEARING OFFICER GEFTER: Do any of the  
8 intervenors have questions of the witness, just  
9 let me know. Mr. Boyd and then Mr. MacDonald.

10 CROSS-EXAMINATION

11 BY MR. BOYD:

12 Q Basically I was going to ask the same  
13 questions I asked the applicant, which are, in  
14 your analysis did you consider the worst case  
15 scenario of the production of PM10 as a secondary  
16 source from the ammonia slip? And if you didn't,  
17 how did you account for the health effects of  
18 PM10?

19 A My testimony dealt only with nine  
20 criteria pollutants, so I didn't look at the issue  
21 of PM10 one way or another.

22 Regarding ammonia slip, ammonia is one  
23 of the toxic substances that's emitted, and so it  
24 is, in and of itself, included in the health risk  
25 assessment. But I didn't look at the particulate

1 matter.

2 Q And have you seen my testimony? Have  
3 you had an opportunity to look at this?

4 A I glanced through it briefly.

5 Q I also would once again cite the --

6 HEARING OFFICER GEFTER: Exhibit 62.

7 BY MR. BOYD:

8 Q -- exhibit, all right, 62. And  
9 basically -- actually, I don't mean to cite this.  
10 What I mean to cite is are you aware of the  
11 results from the Bucket analysis?

12 A I saw that briefly, as well.

13 Q And in your analysis did you base your  
14 analysis on different ambient levels for these  
15 pollutants than were measured? And, if not, does  
16 that in any way affect your analysis?

17 A The health risk analysis, in and of  
18 itself, did not consider the background levels of  
19 pollutants, because it's an analysis strictly of  
20 the emissions from the plant, itself.

21 I looked at background levels in  
22 relation to cumulative effects, and as far as the  
23 samples that were taken there, those were samples  
24 that were taken on basically I guess single  
25 samples from one day at one time. And therefore,

1 I didn't consider them, and I don't think -- they  
2 would not change my conclusions because the  
3 background samples I looked at constituted trends  
4 from 1993 through 1997.

5 And it's pretty well known that levels  
6 can fluctuate from one day to the next depending  
7 on which way the wind blows, and depending on the  
8 emissions from any particular facility.

9 Toxic emissions from facilities tend to  
10 dominate close end, and they tend to, once you get  
11 further and further away from a source, it tends  
12 to become less and less important.

13 The Bay Area District looked at this and  
14 they concluded that because of that the actual --  
15 the gross amounts emitted from a facility are  
16 actually less important than how they're  
17 distributed. In other words, the exposure is more  
18 important than the gross amounts.

19 If you have ground level emitters, for  
20 example, such as a gas station or dry cleaners, it  
21 could have a higher effect even though there were  
22 lesser amounts of pollutants emitted than a power  
23 plant which might put out higher amounts of  
24 pollutants, but it's more well dispersed.

25 So by the time somebody's actually

1 exposed to them, that's quite a different story.

2 Q Okay, in your cumulative analysis you  
3 were talking about you did your cumulative  
4 analysis and you also included in that other sites  
5 of emission sources for these, including, you  
6 said, the Pittsburgh District Energy Facility was  
7 one of them.

8 But then you also went on to say that  
9 they weren't really additive because they  
10 basically didn't -- the impact zones were too  
11 different from each other for it to be additive.

12 A Right.

13 Q Is that because of some model that you  
14 did that shows that those pollutants wouldn't be  
15 dispersed over a wide enough area to be  
16 cumulatively additive with the other facilities?  
17 Or is it that they basically didn't disperse  
18 beyond some footprint that you identified further  
19 distribution that didn't commingle?

20 A The reason that you can't add these  
21 together is I took the location, the single point  
22 location of each facility that I looked at,  
23 Pittsburgh, Dow Chemical and Delta, and at the  
24 single point of maximum impact, which is again  
25 less than one in a million for the two power

1 plants, and then 14 in a million for Dow Chemical,  
2 they're geographically in different locations.

3 So, it really doesn't make sense to add  
4 them together. But if you did add them together,  
5 for example, say if they were all co-located, you  
6 would have 14 in a million from the Dow Chemical  
7 to .38 from this facility and Pittsburg was also  
8 less than one in a million, so you would get 14  
9 plus .38 plus .something, you know, about .5 or  
10 whatever.

11 And theoretically you can do that. And  
12 then you would have to ask yourself, is that, you  
13 know, cumulatively significant.

14 But in reality, the geographical  
15 locations are miles away from each other, so you  
16 couldn't really have somebody exposed to the  
17 points of maximum impact at the same time --

18 Q Dow is geographically over a mile away  
19 from the Delta Project?

20 A No, the points of maximum impact are.

21 Q Oh, okay.

22 A And that is because the stacks are  
23 different heights. The emissions come out at --  
24 the exhaust gases are different temperatures, so  
25 they disperse in different ways.

1                   And in reality -- this whole notion  
2           about points of maximum impact is a theoretical  
3           construct from a computer program to try to be as  
4           conservative as possible. In reality you have a  
5           different -- every hour of every year you've got a  
6           different spot that's got a higher impact than any  
7           other spot.

8                   So, really --

9                   Q     The peak area isn't -- there's no  
10          definite location to it, then? You couldn't  
11          really say that it's going to peak at a certain  
12          location then, could you? It moves, is what  
13          you're saying?

14                  A     It moves and because of that by even  
15          saying that there's a peak, that's being ultra-  
16          conservative. And you're assuming then that  
17          somebody could be exposed at that one point, at  
18          those -- that are relatively high levels, but in  
19          fact, they couldn't be. And even if they were,  
20          the levels, in and of themselves, are  
21          insignificant.

22                  Q     So are you saying that, for example, you  
23          were talking about if you added it with Dow, say  
24          for Dow and the Delta, just those two, and you did  
25          it additively, are you saying that because the



1 level of emissions from the Delta Project is small  
2 compared to Dow, that it's not significant? Is  
3 that what you're saying?

4 A There's really no significance level on  
5 a cumulative basis. There's established that the  
6 overall cancer rate is about 250,000 in a million.  
7 And the cancer risk from inhalation is about 200  
8 in a million, 194.

9 There's really no set point at which you  
10 say something is significant or not. What you  
11 would do is, as the applicant had done, go ahead  
12 and take a look at the cancer burden, which is the  
13 expected actual cancer cases, and even that is far  
14 less than one. And that, in and of itself, is  
15 ultra-conservative, because you're taking the  
16 maximum point of impact, here .38 in a million,  
17 and multiplying that by a certain population.

18 And, in fact, nobody is really exposed  
19 to this on an actual real-life basis. It's just  
20 something, the way we calculate it to figure out  
21 whether or not things are significant.

22 HEARING OFFICER GEFTER: Thank you.  
23 We'll go off the record for a minute.

24 (Off the record.)

25 HEARING OFFICER GEFTER: You may ask

1 your question.

2 MR. BOYD: Okay.

3 BY MR. BOYD:

4 Q In your analysis did you consider the  
5 impacts on asthma and also did you consider --  
6 when you were doing your analysis did you consider  
7 the impacts on children?

8 A The reference exposure levels that are  
9 used in the public health analysis do consider the  
10 most sensitive receptors for any individual  
11 chemical.

12 In some cases those are children, and in  
13 some cases those could be people who already have  
14 asthma. So to that extent those are already  
15 included.

16 The Office of Environmental Health  
17 Hazard Association -- let's see, I forgot what the  
18 A stands for -- Assessment -- Office of  
19 Environmental Health Hazard Assessment publishes  
20 the reference exposure levels and they make it a  
21 point to try to protect as much of the population  
22 as possible, including people who are very  
23 sensitive to chemicals.

24 And these were the levels that were used  
25 for the health effects analysis.

1 MR. BOYD: Okay, thank you.

2 HEARING OFFICER GEFTER: Thank you. Mr.  
3 MacDonald, do you have questions?

4 CROSS-EXAMINATION

5 BY MR. MacDONALD:

6 Q You made a statement about toxins  
7 further away from the source, the less and less  
8 the effect is. What mechanism is in play that  
9 causes that?

10 A Dilution.

11 Q Dilution. And how fast does this  
12 dilution occur?

13 A That depends on the weather conditions.

14 Q Okay. Would you say within a mile?

15 A Depends on the weather conditions.

16 Q Okay, have --

17 A It could be anything.

18 Q -- have you done any dilution factors  
19 between the Pittsburg facilities and the Bethel  
20 Island monitoring station?

21 A The Bethel Island monitoring station --

22 MR. RATLIFF: I'm sorry, Jim, are you  
23 talking about now PM10 monitoring at Bethel  
24 Island?

25 MR. MacDONALD: No, any toxins. I was

1       talking about health and health risks. I'm just  
2       wondering if he's done any --

3               MR. RATLIFF: Is Bethel Island a toxics  
4       monitoring station, also?

5               HEARING OFFICER GEFTER: Okay, wait a  
6       second, Mr. Ratliff, direct your question to me,  
7       and then we can find out what the issues are.

8               MR. RATLIFF: Well, okay, I'll ask you.  
9       Is Bethel Island a toxics monitoring station?

10              (Laughter.)

11              HEARING OFFICER GEFTER: Based on the  
12       testimony so far tonight we haven't heard that.  
13       So, therefore, I would say that you're asking an  
14       air quality question instead of a public health  
15       question. You need --

16              MR. MacDONALD: Well, it is a health  
17       question because we're talking about toxins.

18              HEARING OFFICER GEFTER: But the --

19              MR. RINGER: I can answer that.

20              HEARING OFFICER GEFTER: Okay, do you  
21       want to answer the question?

22              MR. RINGER: Bethel Island does not have  
23       a toxics monitoring station. Any reference that I  
24       made to local monitoring of toxics was from the  
25       Antioch station.

1 HEARING OFFICER GEFTER: Okay, so he  
2 doesn't have an answer to your question. Could  
3 you move on?

4 MR. MacDONALD: Okay.

5 BY MR. MacDONALD:

6 Q Well, same question about the Antioch  
7 station. Do you have -- have you made  
8 calculations for dilution from the sources to the  
9 monitoring site?

10 MR. RATLIFF: Again, I don't want to  
11 object to the question, but I think I have to  
12 point out that this witness did the TACs, toxic  
13 air contaminants, and the other witnesses that we  
14 had before were doing -- I think what you're  
15 interested in is probably the dilution for  
16 criteria contaminants that are measured at Bethel  
17 Island.

18 MR. MacDONALD: Well, we were also  
19 talking about maximum cancer rates of area,  
20 maximum potential.

21 Anyway, I'll accept that.

22 BY MR. MacDONALD:

23 Q Okay, next question. We were talking  
24 about designating the highest risk areas and that  
25 for even plants that are close together, that that

1       can not coincide, but there can be quite a  
2       difference.

3               Now, is all the toxins and air pollution  
4       coming out of this plant dropping right onto that?  
5       Or is there a footprint where as you get further  
6       and further away from that highest level that the  
7       levels of toxins are dropping?

8               MR. RATLIFF: Do you understand the  
9       question?

10              MR. RINGER: Yes. I'll refer to my  
11       testimony, on page 35 again it depends on the  
12       weather conditions. But looking at the worst case  
13       weather conditions, which result in the highest  
14       impacts at any location, then it turns out that  
15       for example the Pittsburgh District Energy  
16       Facility, the maximum cancer risk is five miles  
17       away from the site.

18              For the Delta Energy Center Facility the  
19       maximum risk is 5.5 miles south of the site. So  
20       the answer is it doesn't just go up and come  
21       straight down. But in the worst case that's quite  
22       some distance away from the plant.

23              Q       Okay, but there is, as you go away, if  
24       you had a model and the further away that you went  
25       from that center area there would still be

1 concentrations of pollution, but it would be at  
2 lower concentrations than --

3 A You could draw an isoplat where the  
4 center was the point of maximum impact, so if the  
5 center was say five miles away from the facility  
6 and you started drawing isoplat lines away from  
7 the center, for cancer, for instance, if the  
8 maximum impact were .38 in a million, then as you  
9 got further away from that point it would  
10 decrease. So you'd go .38, you know, down to zero  
11 essentially.

12 Q Thank you. Is the one in a million  
13 threshold basically is the level of concern where  
14 additional studies have to be done. Is that what  
15 we're considering the threshold?

16 A Staff considers that to be a de minimis  
17 impact, which means essentially no impact  
18 whatsoever. But if it were more than one in a  
19 million then we would start looking in more detail  
20 at why it was more than one in a million.

21 In other words, the initial modeling  
22 that's done is a screening analysis modeling which  
23 uses certain assumptions which purposely result in  
24 the highest level. If the level were more than  
25 one in a million we'd start looking at more

1 refined assumptions which would give us a better  
2 picture of reality, rather than just theory.

3 Q Okay, so if you had six different plants  
4 that had six different maximum cancer locations  
5 but the overlapping affected communitive area for  
6 each was .2 in a million, .2 in a million, .2 in a  
7 million, .2 in a million, .2 in a million and .2  
8 in a million you could come up with a 1.2 in a  
9 million exposure from those six plants, even  
10 though none of those individuals were actually hit  
11 by the highest concentration in a cumulative  
12 analysis?

13 A Theoretically if you drew out the  
14 isoplat to a large enough area to accommodate  
15 enough facilities, yes, you could probably add  
16 things together like that.

17 Q Okay. And you made a statement that  
18 Hispanics have a higher rate of cancer, is that  
19 correct?

20 A Contra Costa County is --

21 Q Contra Costa --

22 A -- yes.

23 Q Did you do a specific mapping of where  
24 the Hispanic populations are located and compare  
25 it to this facility?



1           A     No.

2           MR. MacDONALD:  That's all of my  
3     questions of this witness.

4           HEARING OFFICER GEFTER:  Thank you.  
5     Redirect.

6           MR. RATLIFF:  No.

7           HEARING OFFICER GEFTER:  The witness may  
8     be excused.

9           We're going to go off the record.

10          (Off the record.)

11          HEARING OFFICER GEFTER:  We're back on  
12     the record.  The applicant is going to present  
13     their testimony on socioeconomics.

14          I'm sorry, we actually skipped a set of  
15     testimony on public health.  The intervenors have  
16     some testimony on public health.  And who's going  
17     to make the presentation?  Californians -- Mr.  
18     Boyd, are you going to present the testimony?

19          Okay, we're off the record.

20          (Off the record.)

21          HEARING OFFICER GEFTER:  We're back on  
22     the record to take direct testimony from  
23     Californians for Renewable Energy who is going to  
24     sponsor Ms. Lagana as a witness on the subject of  
25     public health.

1                   Okay, you may proceed.

2                   DIRECT EXAMINATION

3           BY MR. BOYD:

4           Q       Paulette, I wanted to ask you --

5                   HEARING OFFICER GEFTER: Well, first of  
6           all, Ms. Lagana needs to be sworn, and identify  
7           herself.

8                   MR. BOYD: Okay, I can't do that.

9                   HEARING OFFICER GEFTER: The reporter  
10          will swear her.

11          Whereupon,

12                   PAULETTE LAGANA

13          was called as a witness herein and after first  
14          being duly sworn, was examined and testified as  
15          follows:

16                   HEARING OFFICER GEFTER: Please identify  
17          yourself and tell us your position.

18                   MS. LAGANA: My name is Paulette Lagana.  
19          I am President of the Board of Directors of CAP-  
20          IT. That's Community Abatement of Pollution and  
21          Industrial Toxins.

22                   We're an environmental education group  
23          here in Antioch, Pittsburg and Bay Point.

24                   HEARING OFFICER GEFTER: Thank you. You  
25          may ask questions.

1 BY MR. BOYD:

2 Q Okay, Paulette, if you would please  
3 describe for the record what your Bucket results  
4 were, when they were taken, who did your chemical  
5 analysis, that kind of information.

6 HEARING OFFICER GEFTER: Okay, first of  
7 all, you're referring to exhibit 71?

8 BY MR. BOYD:

9 Q In exhibit 71. And then after you've  
10 done that, if you would please describe the  
11 results that you obtained, and what information  
12 you may have gotten from the lab that did the  
13 analysis about this.

14 A Okay. May I state for the record had I  
15 been given more than a five-minute warning you  
16 would have had a spreadsheet on this.

17 The Bucket Brigade is a community-based  
18 air sampling project that CAP-IT sponsors. What  
19 it is, it is to take VOCs, volatile organic  
20 compounds, and some sulfides that can be captured  
21 in a bucket in a process.

22 The results are -- the air samples are  
23 captured in a Tedlar bag. The bag is then sent to  
24 a lab for analysis. The lab we chose was  
25 Performance Analytic in Simi Valley.

1                   The samples are taken at five different  
2                   locations and across Antioch, Pittsburg and Bay  
3                   Point. The results were analyzed and interpreted  
4                   by Communities for a Better Environment, as our  
5                   technical advisers.

6                   The samples were taken on Tuesday,  
7                   October 19, 1999. It was done on a day that had  
8                   no known local chemical releases nor was it a  
9                   spare-the-air day, so that levels would be more  
10                  routine that we were monitoring. It was meant to  
11                  be a background sampling.

12                  The results were FedEx'd to Performance  
13                  Analytic within 24 hours for analysis. That  
14                  analysis was then sent to CBE, they interpreted  
15                  the analysis and I have the results here.

16                  The locations in Antioch were at 2300  
17                  Wilbur, which is near the Gaylord facility. And  
18                  at that location the results brought in acetone at  
19                  10 ppb, toluene at 13 ppb. I don't have, and it  
20                  was not provided to me, that there is no -- Bay  
21                  Area background levels for acetone are  
22                  unavailable, but would likely be lower than 10  
23                  ppb. Toluene does have a Bay Area average  
24                  background level of 1.9 ppb. And the toluene that  
25                  was found at Wilbur is 13.0.

1           There were other chemicals involved, but  
2           I will just give you the highlights of the ones  
3           that we felt were most significant.

4           The results provide a snapshot of the  
5           soup of air toxins which can be present. With the  
6           exception of two chemicals, they were detected at  
7           low levels. The chemicals they're talking about  
8           is acetone and toluene.

9           The second location we were at was at G  
10          Street and 4th, which is right in the heart of  
11          downtown Antioch. The results of acetone there  
12          were 22 ppb. And toluene, which remember is an  
13          average of 1.9 ppb, we found as 23.0 ppb. So  
14          those, we felt, were significant indicators.

15          In Pittsburg we took two samples. One  
16          at the Central Addition, which is Elm Street and  
17          near the Pittsburg/Antioch Highway. And in that  
18          location we found high levels in three compounds,  
19          acetone, MTBE and toluene.

20          Acetone was found at 15 ppb; MTBE, which  
21          background data from the 1995 averaged at 1 ppb,  
22          we found MTBE to be 5.4 ppb. And toluene, which  
23          again the average is 1.9 ppb, we found at 8.5 ppb.

24          The second location in Pittsburg was at  
25          Marina park. And there we found two substances,

1       one was carbonylsulfide which averages 3 ppb, and  
2       we found a slight elevation at 3.57 ppb. And  
3       acetone was at 7.1 ppb.

4               As I said, a spreadsheet would have been  
5       so much easier for you to follow on this.

6               Bay Point, we took a sample at Chandler  
7       Street, which for those of you who are familiar, I  
8       hope, with Bay Point, it is at a location that is  
9       west of BART, north of BART, and it's right off  
10      Willow Pass Road, if you know T-Bone's Restaurant,  
11      it's right across from there.

12              There we found five compounds. Carbonyl  
13      sulfide which average is 3 ppb, we found at 3.95,  
14      only a slight elevation. Acetone was 12 ppb.  
15      MTBE, which averages 1 ppb, we found 12.0 ppb.  
16      Toluene, which averages 1.9 ppb, we found at 25  
17      ppb. That was the highest record in this one  
18      sample. And M&P xylenes we found at 7.0.

19              In conclusion, what we came to was that,  
20      yes, this was a single sample. We intend to do  
21      more. We wanted to get a baseline and place a  
22      stake in the ground, say this is what we're  
23      finding at this point. And we would like to then  
24      be able to do a running record of these kinds of  
25      samples over time.

1                   So the results were not dramatic, they  
2                   were slight elevations in some cases.

3                   And that's my testimony.

4                   Q     Okay, I have no further questions.

5                   HEARING OFFICER GEFTER:   Okay, do you  
6                   want to move to have exhibit 71 received into  
7                   evidence?

8                   MR. BOYD:   Yes.

9                   HEARING OFFICER GEFTER:   Okay.   Is there  
10                  any objection?

11                  MR. HARRIS:   No objection.

12                  HEARING OFFICER GEFTER:   Okay, exhibit  
13                  71 is received into evidence at this time.

14                  MR. HARRIS:   I do have some cross-  
15                  examination.

16                  HEARING OFFICER GEFTER:   Yes, you may  
17                  cross-examine.

18                                 CROSS-EXAMINATION

19                  BY MR. HARRIS:

20                  Q     Paulette, with regard to the sampling,  
21                  first you noted that it wasn't dramatic, you said,  
22                  it's near background --

23                  A     Right, it was slight elevations.

24                  Q     Okay, thanks.

25                  A     In some contents.

1           Q     And over what period of time were these  
2     samples collected? Was it, you know, one hour,  
3     three hours, 24 hours?

4           A     The way the samples are collected is  
5     there is a bucket that's about a five-gallon  
6     bucket you can get in Home Depot.

7           Q     And how long was that --

8           A     There is an intake and an out-take.

9           Q     I'm sorry, how long is it out? Is it  
10    one hour, three hours?

11          A     It's a matter of minutes.

12          Q     Minutes?

13          A     Truly. What you do is you just create a  
14    vacuum inside the bucket, open a valve, take the  
15    sample of around two to two and half minutes,  
16    close the valve, close the vacuum that creates the  
17    inclusion, and then you go on from there.

18          Q     Can I ask you a couple specific  
19    questions about the document that we have in front  
20    of us?

21          A     Sure.

22          Q     I'm looking at exhibit whatever number  
23    it is --

24          A     71.

25          Q     -- 71, I missed it by 10, sorry, 71.



1 I'm looking at the first table, preliminary  
2 summary of Pittsburgh and Bay Point Bucket Results.  
3 Do you have that in front of you?

4 A Yes, um-hum.

5 Q Right after the word preliminary there's  
6 a footnote there that indicates that it is  
7 preliminary. On my copy the footnote is cut off,  
8 so could you read what that says to me?

9 A Certainly. The footnote states that,  
10 given that we have just recently received these  
11 results from the lab, sufficient time was not  
12 available to provide a more detailed analysis. A  
13 more detailed analysis could provide information  
14 such as background levels detected at regulatory  
15 agency monitoring stations around the Bay Area for  
16 each chemical where available. More specific  
17 health information on each chemical, additional  
18 information on general hydrocarbons also analyzed,  
19 and more thorough quality assurance, quality  
20 control methods, and data on possible sources of  
21 contamination in sampling, detection limits, et  
22 cetera.

23 Q Can I get a copy from you later that has  
24 the footnote?

25 A Sure, absolutely.

1           Q     A couple other questions about the  
2           sampling protocol. On the next page, I think it  
3           is, if I'm following this correctly, the results  
4           show somewhat elevated levels for certain  
5           chemicals, and then there's a note again down at  
6           the bottom that talks about acetone and toluene.

7           A     Right.

8           Q     And it says essentially, well, let me  
9           ask you. It talks about possible contamination of  
10          those samples.

11          A     Of the bucket sample.

12          Q     Of the bucket sample.

13          A     Right.

14          Q     So can you tell me a little bit more  
15          about that?

16          A     Well, according to Communities for a  
17          Better Environment, who did the analysis, they  
18          said that there may be trace elements of both  
19          acetone and toluene that can get into the sampling  
20          simply because of the fact that if you put it in a  
21          FedEx Express box that had maybe a certain kind of  
22          glue that closes the box, that may get into the  
23          sample.

24                     And so given that there may be a trace  
25          element of that, again, that's why we're saying

1 the samples are slightly elevated.

2 Q Okay, well, I appreciate the disclosure  
3 there. I think that's probably it for that.  
4 Thank you very much.

5 A Okay.

6 HEARING OFFICER GEFTER: Does staff have  
7 any cross-examination?

8 MR. RATLIFF: No.

9 HEARING OFFICER GEFTER: Thank you very  
10 much.

11 MS. LAGANA: Thank you.

12 HEARING OFFICER GEFTER: Mr. MacDonald,  
13 do you have any witnesses to present on public  
14 health?

15 MR. MacDONALD: I'd like to move that  
16 the testimony, 67 and 68 of Joe Hawkins be entered  
17 into the record.

18 HEARING OFFICER GEFTER: Is there any  
19 objection to receiving those documents?

20 MR. HARRIS: No objection.

21 HEARING OFFICER GEFTER: Staff?

22 MR. RATLIFF: No.

23 HEARING OFFICER GEFTER: No objection.

24 Okay, exhibits 67 and 68, which is filings by  
25 Intervenor Community Health First, Mr. Joe

1 Hawkins, are now received into the record.

2 Are we now ready to proceed to  
3 socioeconomics? Applicant has a question?

4 MR. HARRIS: Just give me a moment,  
5 please, I'm sorry.

6 I'm sorry, Susan, did you close the  
7 record for public health?

8 HEARING OFFICER GEFTER: For public  
9 health?

10 MR. HARRIS: Yes.

11 HEARING OFFICER GEFTER: I asked if  
12 there were any more questions and there was none.

13 MR. HARRIS: Actually just one, there's  
14 actually one more document I think I'd like to  
15 introduce, just to have a clear record on Mr.  
16 MacDonald's role in the proceedings.

17 I have a document that was filed on  
18 September 8, received September 9 by the  
19 Commission wherein Joe Hawkins states that Jim  
20 MacDonald can be his representative for these  
21 proceedings. And I'd just like to add that to the  
22 record so that we're clear that Mr. Hawkins was  
23 represented tonight in this proceeding.

24 HEARING OFFICER GEFTER: All right. Do  
25 you want to tell me the date on that letter?

1 MR. HARRIS: I'll give you a copy --

2 HEARING OFFICER GEFTER: No, I remember  
3 the letter, I just don't have the date.

4 MR. HARRIS: It's docket stamped, the  
5 date is September 8, and it's marked received  
6 September 9th.

7 MR. MacDONALD: I'll also stipulate that  
8 that is correct.

9 HEARING OFFICER GEFTER: Okay, is there  
10 any objection to receiving exhibit 75?

11 MR. RATLIFF: No.

12 HEARING OFFICER GEFTER: That is, of  
13 course, identified as exhibit 75, and is now  
14 received into evidence. And this is a petition  
15 that was filed by Community Health First. And in  
16 it it indicates that Mr. MacDonald would be  
17 available to ask questions and make comments on  
18 behalf of Community Health First.

19 MR. HARRIS: Just further clarification,  
20 Susan. I just want to make sure that my  
21 understanding is that Mr. MacDonald has sponsored  
22 in Joe Hawkins' testimony, --

23 HEARING OFFICER GEFTER: Yes.

24 MR. HARRIS: -- and Mr. MacDonald is  
25 available for cross-examination? I don't have

1       any, but he was available for cross-examination as  
2       part of the proceedings.

3               HEARING OFFICER GEFTER:   I would -- Mr.  
4       MacDonald is -- I think, you know, from a formal  
5       point of view that's correct.

6               MR. HARRIS:   Okay, that's fine.

7               HEARING OFFICER GEFTER:   But you don't  
8       have cross-examination?

9               MR. HARRIS:   I don't have cross-  
10       examination.   I just wanted to be perfectly  
11       candid.

12              HEARING OFFICER GEFTER:   Right, but what  
13       I -- on exhibit 75 it was sponsored by the  
14       applicant, it was not sponsored by Mr. MacDonald.  
15       So it's offered by --

16              MR. HARRIS:   Right, previous to.

17              HEARING OFFICER GEFTER:   -- but Mr.  
18       MacDonald had no objection to the document being  
19       admitted, and in fact he agreed with its  
20       representation.

21              MR. ELLISON:   Ms. Gefter, we're not  
22       referring to exhibit 75, we're referring to the --

23              HEARING OFFICER GEFTER:   No, I  
24       understand the fact that he moved the other -- the  
25       testimony of Joe Hawkins into the record made him

1       available for cross-examination. I understand the  
2       technicality. And from a technical perspective,  
3       that's correct.

4               MR. ELLISON: Okay.

5               HEARING OFFICER GEFTER: Are we now  
6       ready to go to socioeconomics?

7               MR. HARRIS: Could we close the record  
8       on public health, or did we close the record on  
9       public health questions?

10              HEARING OFFICER GEFTER: We can right  
11      now.

12              MR. HARRIS: Okay.

13              HEARING OFFICER GEFTER: The record on  
14      public health is closed.

15              MR. HARRIS: Thank you.

16              HEARING OFFICER GEFTER: Are you ready  
17      with your witness on socioeconomics?

18              MR. HARRIS: Yeah, we have actually two  
19      witnesses, Doug Buchanan to do the normal  
20      socioeconomic testimony, and then we have Wynnlee  
21      Crisp who will be addressing the issue of  
22      environmental justice.

23              So I was going to suggest we start with  
24      Doug since that issue will probably go quickly.

25              HEARING OFFICER GEFTER: Fine. Do you

1 want to swear both witnesses at this time? Mr.  
2 Buchanan is already sworn, but perhaps you want to  
3 swear your other witness.

4 MR. HARRIS: It may seem like it was  
5 yesterday, but it was earlier, he was sworn at the  
6 beginning. Mr. Crisp was sworn at the beginning  
7 at 5:00, so.

8 HEARING OFFICER GEFTER: That's correct.

9 MR. HARRIS: It was still today.

10 HEARING OFFICER GEFTER: Yes.

11 MR. HARRIS: All right, I'll start with  
12 Mr. Buchanan, then, if that's okay, Susan.

13 DIRECT EXAMINATION

14 BY MR. HARRIS:

15 Q Could you state your name for the  
16 record, please.

17 A Douglas Buchanan.

18 Q And which subject matter are you here to  
19 sponsor tonight?

20 A Socioeconomic resources.

21 Q Can you briefly summarize your  
22 qualifications?

23 A I'm the Development Manager for the  
24 Delta Energy Center Project. I'm a licensed  
25 professional engineer, California. And a resident



1 of Pittsburg.

2 Q Thank you. Specifically which documents  
3 are you sponsoring as part of your testimony?

4 A I'll be sponsoring section 8.8 of the  
5 AFC, which has been entered previously as exhibit  
6 2; the Calpine/Bechtel status report number 4,  
7 filed on July 22, submitted as exhibit 16.

8 A letter from myself to the CEC dated  
9 August 13, '99 regarding property tax  
10 distributions, which is new, and I believe we have  
11 to enter that this evening.

12 HEARING OFFICER GEFTER: What exhibit is  
13 that?

14 MR. BUCHANAN: This will be a new  
15 exhibit.

16 HEARING OFFICER GEFTER: A new exhibit.

17 MR. HARRIS: It's 52, actually, Susan,  
18 on the list.

19 MR. BUCHANAN: It's not new, it's 52.

20 BY MR. HARRIS:

21 Q And are you also sponsoring Mr.  
22 Carrier's testimony which is item 50?

23 A That is correct.

24 MR. HARRIS: So, for clarity's sake,  
25 section 8.8 is part of exhibit 2. Status report

1       number 4 is exhibit 16. The letter from Doug  
2       Buchanan is exhibit number 52. And the testimony  
3       from John Carrier being sponsored by Mr. Buchanan  
4       is exhibit number 50.

5               MR. BUCHANAN: We have one additional  
6       document that was presented to us this evening  
7       that we'd like to enter into the record, also.  
8       This is a letter from the City of Pittsburg to  
9       Commissioner William Keese in regards to the City  
10      of Pittsburg's position regarding the Delta Energy  
11      Center Project. It's germane to socioeconomics in  
12      that it speaks to the desire for high quality  
13      union jobs and long-term jobs that would provide  
14      family wages.

15             I would like to submit this into the  
16      record.

17             HEARING OFFICER GEFTER: Do you have  
18      copies?

19             MR. BUCHANAN: I have the original. Can  
20      we make copies? Thank you.

21             HEARING OFFICER GEFTER: Okay, that  
22      letter will be identified as exhibit 76.

23             HEARING OFFICER GEFTER: Okay, good.

24      BY MR. HARRIS:

25             Q     Now, Doug, were these documents, other

1       than the letter from Pittsburg, obviously, either  
2       prepared by you or at your direction?

3           A       They were prepared at my direction.

4           Q       And are the facts true to the best of  
5       your knowledge?

6           A       They are.

7           Q       Do you have any corrections or changes  
8       to this testimony?

9           A       No corrections to this testimony.

10          Q       And do you adopt it as your testimony  
11       for this proceeding?

12          A       I do.

13          Q       Would you please summarize the  
14       socioeconomic testimony.

15          A       I have only three basic points to  
16       discuss with the socioeconomic -- would have been  
17       easier three hours ago --

18                   (Laughter.)

19               MR. BUCHANAN: -- only three points to  
20       summarize on my testimony, and that in regards to  
21       the Delta Energy Center Project Development here  
22       in Pittsburg.

23                   The first is pertinent to the labor  
24       pool, and the impact of this project regarding  
25       labor coming into the community. It's important

1 to note that in Contra Costa County and in  
2 counties surrounding we have a very very deep and  
3 qualified labor pool locally. And that it is  
4 expected that the vast majority, if not all of the  
5 labor that will be participating in the  
6 construction of this facility would be local. And  
7 that they would be residents in the area, that is  
8 the Greater Contra Costa, Alameda and Solano  
9 Counties.

10 The impact of this is such that there  
11 would be no adverse impact in terms of additional  
12 school, community service or other kinds of  
13 services that might be required. Point one.

14 Point two is the number of jobs over the  
15 24-month construction period for this particular  
16 project we're anticipating between 400 and 450  
17 skilled labor jobs. Again, those positions being  
18 filled from the local trades, Contra Costa and  
19 surrounding counties.

20 During the life of the plant the plant  
21 will have a permanent staff of approximately 24.  
22 These are high quality, high paying jobs,  
23 averaging between \$50,000 and \$70,000 per year.  
24 These are considered family wage jobs.

25 And in addition to the permanent plant

1       staff, there's a fairly significant support or  
2       residual labor effect in regards to the  
3       requirement for ongoing support services and  
4       maintenance kinds of services. Again, those kinds  
5       of services would be procured locally.

6               The final point in my testimony is in  
7       regards to an important and sort of special  
8       circumstance. The Delta Energy Center will reside  
9       in a redevelopment district known as Los Medanos  
10      III. And a characteristic of this district is  
11      such that the property tax that the project will  
12      generate -- and again, my testimony indicates  
13      there will be between \$3.5 and \$4.5 million per  
14      year in property tax -- will go directly into this  
15      redemption district.

16             A special characteristic of this  
17      district is that there's a cost, a revenue sharing  
18      mechanism with Contra Costa County, whereas 55  
19      percent of those property tax dollars will go to  
20      the County, 45 percent will remain in Pittsburg  
21      for infrastructure improvement within the  
22      redemption district.

23             In regards to the County revenue  
24      contribution or revenue sharing, the majority of  
25      those dollars will be -- are directed by agreement

1 to fire protection services. And those dollars  
2 amount to about a million on average per year  
3 through the life of the project. And to put it in  
4 terms that the Contra Costa Fire District began to  
5 appreciate, that's between two and three fire  
6 trucks per year for 30 years.

7 So, we'll have lots of fire trucks and  
8 they still are adamant they will not let me select  
9 the color. So.

10 (Laughter.)

11 MR. BUCHANAN: The point is that there  
12 is a fairly dramatic infusion of property tax  
13 dollars from this project that do remain local and  
14 will go directly to supporting local services.

15 That concludes my summary.

16 BY MR. HARRIS:

17 Q Thank you, Doug. With the labor pool,  
18 that will be union labor that you're going to be  
19 using for construction?

20 A That's correct, Calpine/Bechtel have an  
21 agreement at the state and local level to use  
22 qualified local union trades skills.

23 Q Thank you. Now, you've had a chance to  
24 review the final staff assessment, is that  
25 correct?

1           A     Yes, I have.

2           Q     And you've reviewed the conditions of  
3     certification?

4           A     I have.

5           Q     And you find them acceptable?

6           A     We find them acceptable.

7           MR. HARRIS:  At this point I would move  
8     the documents into evidence if that's appropriate.

9           HEARING OFFICER GEFTER:  Let's go over  
10    each document again, the ones that you wish to  
11    move in.

12          MR. HARRIS:  Section 8.8 is a portion of  
13    exhibit 2; the status report number 4 is exhibit  
14    16.  I think that's already been admitted.  The  
15    letter from Doug Buchanan, number 52, is a new  
16    item.  That will need to be admitted.  This  
17    testimony that Doug just presented is item 50,  
18    that's also new and will have to be admitted.  And  
19    the letter from the City of Pittsburgh is a new  
20    item, that's exhibit 76.

21          And I'd move all those documents into  
22    evidence at this point.

23          HEARING OFFICER GEFTER:  Okay, is there  
24    any objection to these documents being admitted  
25    into the record?

1 MR. RATLIFF: No.

2 HEARING OFFICER GEFTER: Thank you,  
3 staff. Okay. No objections, the documents  
4 enumerated by Mr. Harris are now received into  
5 evidence.

6 MR. HARRIS: Make the witness available  
7 for cross-examination.

8 HEARING OFFICER GEFTER: Thank you. Do  
9 you want to go on to your other witness first on  
10 direct, and then make both of them available for  
11 cross-examination? Why don't we do it that way.  
12 I think that would be more efficient.

13 MR. HARRIS: You prefer to do it that  
14 way? Because we have a witness from CURE, as  
15 well, that closely parallels --

16 HEARING OFFICER GEFTER: Yes, why don't  
17 we -- applicant present all your witnesses on  
18 direct for socioeconomics, and then we'll move on.  
19 Thank you.

20 MR. HARRIS: Thank you. Then I would  
21 ask our next socioeconomic witness to prepare  
22 himself, and that's Mr. Crisp.

23 DIRECT EXAMINATION

24 BY MR. HARRIS:

25 Q So, could you state your name for the



1 record, please, once we get you a microphone.

2 A I'm Wynnlee Crisp.

3 Q And what's the subject matter you're  
4 here to testify on this evening?

5 A Socioeconomics, more specifically  
6 environmental justice.

7 Q And could you summarize your  
8 qualifications for us, please?

9 A Yes, I hold a bachelor of science in  
10 biology and chemistry. The significance of that  
11 to my testimony is the study of physics, organic  
12 and inorganic chemistry, and sociology.

13 Hold also a master of science in natural  
14 resources management encompassing air quality,  
15 noise, wildlife, land use and socioeconomics.

16 I have an MBA, the portion of that that  
17 is most applicable tonight is the study of  
18 statistics, economics and quantitative methods.

19 I also am CH2M Hill's Nationwide  
20 Director of Environmental Justice Analytical  
21 Technology. I have 25 years experience in  
22 directing and conducting environmental impact  
23 statements under the National Environmental Policy  
24 Act and under its state equivalents like the  
25 California Environmental Quality Act.

1           Q     Specifically which documents are you  
2     sponsoring as part of your testimony tonight?

3           A     The response to Joe Hawkins' data  
4     request set 2, dated October 8, 1999. The  
5     application for certification Calpine Corporation/  
6     Bechtel Enterprises, December 18, 1998. And the  
7     amendment to socioeconomic testimony dated  
8     November 8, 1999.

9           MR. HARRIS: For the record, the  
10    response to Joe Hawkins' data request number 2 is  
11    item 53. The application for certification,  
12    obviously, is exhibit 2. And the November 8th  
13    filing of the socio testimony, as revised, is item  
14    number 51.

15   BY MR. HARRIS:

16           Q     Now, were these documents prepared  
17    either by you or at your direction or with your  
18    review?

19           A     I have reviewed all the documents. I  
20    prepared the amendment to the socioeconomic  
21    testimony dated November 8, 1999.

22           Q     Based on your review are the facts true  
23    to the best of your knowledge?

24           A     Yes, they are.

25           Q     Do you have any corrections to your

1 testimony?

2 A I don't.

3 Q And do you adopt it as your testimony  
4 for this proceeding?

5 A I do.

6 Q Okay, Mr. Crisp, would you go ahead and  
7 summarize your testimony now for us?

8 A Yes, I will. The purpose of my  
9 testimony and my study was to provide an  
10 independent analysis of the potential for an  
11 environmental justice issue surrounding the  
12 proposed project.

13 More specifically, it was applying the  
14 Presidential Executive Order 12890, environmental  
15 justice, in order to determine if there was a  
16 potential for disproportionately high and adverse  
17 effects on the minority or low-income population.

18 In order to make that determination  
19 there are three necessary conditions for an  
20 adverse finding. One of those is there has to be  
21 a minority or a low-income population in the  
22 impact zone.

23 The second one is there has to be a high  
24 and adverse impact. And the third one is that  
25 that high and adverse impact has to be

1 disproportionately distributed on the minority and  
2 low-income population.

3 I'd like to discuss each of those three  
4 categories. First, on the issue of the minority  
5 and low-income population in the impact zone.  
6 It's been documented in testimony that was  
7 submitted earlier by the CEC Staff, and  
8 independently verified by myself, that the  
9 percentage composition of the population in a  
10 broad area around the power plant, or the proposed  
11 power plant site is less than 50 percent minority,  
12 and far less than 50 percent low-income.

13 The significance of that 50 percent  
14 threshold is, given an equal level of impact, if  
15 the representation of minorities in that impact  
16 zone is less than 50 percent then they couldn't  
17 possibly have received a disproportionate share of  
18 the effect.

19 So the finding there was that the first  
20 condition isn't satisfied in terms of making an  
21 adverse finding. That condition being that the  
22 population in the potential impact zone is not  
23 greater than 50 percent minority, nor greater than  
24 50 percent low income.

25 The second condition is that a high and

1       adverse impact has to exist. We've heard  
2       testimony here tonight, and I've reviewed the  
3       application for certification, and found and  
4       concluded that based on the testimony of others,  
5       and based on information presented in the AFC that  
6       there are not significant adverse impacts.

7               The Environmental Protection Agency, in  
8       their guidance on environmental justice, and as  
9       commonly practiced in environmental justice  
10      analyses equates a significant impact with a high  
11      and adverse impact.

12             So, as a consequence, if there are no  
13      significant impacts, which have been established  
14      here tonight and established in the AFC, then  
15      there are no high and adverse impacts. So the  
16      second condition for an adverse finding is not  
17      met, either.

18             The third condition then that the impact  
19      on the minority and low-income population must be  
20      disproportionately high and adverse obviously  
21      cannot be met if there is not a population that  
22      meets the threshold, and if there is not a high  
23      and adverse impact.

24             So none of the three conditions for a  
25      finding of adverse effect are met.

1           I'd like to talk then specifically about  
2           the three key phases in analytical process that  
3           led to those conclusions and to other elements of  
4           the environmental justice analysis that I  
5           performed.

6           The first of these phases is outreach  
7           and involvement. The second is screening level  
8           analysis. And then the third typical stage is a  
9           detailed examination of the distribution of  
10          impacts on segments of population.

11          In the first category of outreach and  
12          involvement the Executive Order 12890 very clearly  
13          indicates that effective public participation is  
14          one of the goals of environmental justice.

15          So, in addition to the general public  
16          information and involvement that has been  
17          conducted in accordance with the Commission's  
18          rules, there is also a focused effort conducted by  
19          the California Energy Commission Staff.

20          In that, the testimony of Amanda  
21          Stennick, dated September 10, 1999, documented an  
22          interview with Darnell Turner, who also made some  
23          comments here tonight, of the Pittsburg Chapter of  
24          the NAACP. That was specifically a focused  
25          outreach effort to a known representative of the

1 minority population.

2           Additionally, Mr. Turner, at that time,  
3           stated some concerns that the community would have  
4           about the siting process. Those were noise, odors  
5           and landscaping. And the ability to have access  
6           and input to the siting process.

7           So, as a result of that, I specifically  
8           looked at the issues of noise, odor, and visual  
9           impact associated with this project.

10           Beyond that, Calpine/Bechtel also  
11           provided public information on the project. This  
12           was done through letters of notification, through  
13           meetings. There were a number of newspaper  
14           articles that I've seen. There was a Delta Energy  
15           Center Open House. The outreach process there  
16           involves some 19,000 residents in the Pittsburgh  
17           and in the Antioch areas.

18           The meetings were held with what were  
19           identified as key individuals and organizations in  
20           the Pittsburgh area. And this is the typical way  
21           to reach a segment of the population that  
22           generally doesn't come to public meetings.

23           So that part of the process involved  
24           working through representatives of the community  
25           organizations such as the NAACP, the Dow Community

1       Advisory Panel, Central Addition Neighborhood,  
2       East County Boys and Girls Club, Junior  
3       Achievement, Pittsburg Community Advisory  
4       Committee, and environmental organizations, labor  
5       organizations and business groups.

6               The significant thing beyond that is  
7       that those planned outreach efforts spawned  
8       secondary forms of notification and information.  
9       For example, I reviewed an email received on  
10      September 1, 1999, from Joe Hawkins, a local  
11      resident who indicated that he personally informed  
12      residents of the El Pueblo District by going door  
13      to door.

14             And, again, that's another common and  
15      very effective technique for providing information  
16      on a project to the public.

17             My conclusion of that is that one of the  
18      first stages of environmental justice analytical  
19      process, which is outreach and involvement of the  
20      public, was adequately done.

21             The second general part of the process  
22      of analyzing whether an environmental justice  
23      issue exists or not is the first level or  
24      screening level analysis. EPA's own guidance on  
25      screening level analysis describes how this is



1       done.

2                   And essentially lays out the same type  
3       of path that was followed by the CEC Staff in  
4       terms of determining that the potentially affected  
5       population was less than 50 percent minority, and  
6       less than 50 percent low income. And that's  
7       documented in Amanda Stennick's testimony dated  
8       September 10, 1999.

9                   The second step in that EPA method is to  
10      determine if the impacts are likely to fall  
11      disproportionately on the minority or low-income  
12      population. Since it's unlikely that there are  
13      significant impacts that couldn't possibly be the  
14      case.

15                  So, as a result it's my determination  
16      that the CEC Staff completed an adequate screening  
17      level analysis. And I've independently confirmed  
18      that the information that they used was accurate.  
19      And that the conclusion that they drew was  
20      correct.

21                  The significance of having conducted a  
22      screening level analysis that showed no probable  
23      effect is that normally you wouldn't go beyond  
24      that, because there's no indication that you  
25      should.

1                   However, in preparing my testimony I  
2           took it to the next level of detail anyhow. And  
3           the next level of detail is to look at a finer  
4           level of population data, which is in smaller  
5           cells, so that in case there are small pockets of  
6           minority, small pockets of low-income population,  
7           that you could detect it.

8                   The other part of it is to verify that  
9           there either are, or are not, in this case, high  
10          and adverse effects.

11                  My conclusion at that finer level of  
12          detail verifies the conclusion of the screening  
13          analysis which is there is not a potential for an  
14          environmental justice issue associated with this  
15          project.

16                  And that concludes my testimony.

17                  Q     A couple of quick questions for you,  
18          too. Wynnlee, did you have an opportunity to  
19          review the testimony submitted by Joe Hawkins?

20                  A     Yes, I did.

21                  Q     And having reviewed that testimony did  
22          the information there in any way affect your  
23          conclusions?

24                  A     No, it did not.

25                  Q     Similarly, did you have the opportunity

1 to review the testimony submitted by Intervenor  
2 Michael Boyd?

3 A I did.

4 Q And does this information in any way  
5 affect your conclusions?

6 A No.

7 MR. HARRIS: I think that's all I have  
8 for you on direct. So, at this time, Susan, I'd  
9 make the witness available for cross-examination.

10 HEARING OFFICER GEFTER: The Committee  
11 has a question of the witness before we go to  
12 cross-examination.

13 EXAMINATION

14 COMMISSIONER PERNELL: Yes, I'm on page  
15 2 of your document here, the second-to-the-last  
16 paragraph, last sentence that talks about the  
17 Executive Order 12898.

18 And my question is it seems to be  
19 stating here and on the next page that  
20 environmental justice is a voluntarily -- it's  
21 voluntary by the CEC and doesn't have to be in  
22 these proceedings at all.

23 Is that your interpretation?

24 MR. CRISP: That's correct.

25 COMMISSIONER PERNELL: Explain that to

1 me, please.

2 MR. CRISP: The Executive Order issued  
3 by President Clinton in 1994, 12890, Environmental  
4 Justice, was issued to heads of federal  
5 departments and heads of federal agencies.  
6 Consequently, federal departments and agencies are  
7 required to abide by the Executive Order which  
8 says that, they're to make a part of their policy  
9 the examination of, and the avoidance of  
10 disproportionately high and adverse effect on  
11 minority and low-income populations.

12 State agencies aren't subject to  
13 Presidential Executive Orders. And, as a  
14 consequence, you'll notice that other Executive  
15 Orders, and you know they are numbered  
16 sequentially so there are more than 12,900 that  
17 preceded this, aren't addressed in this  
18 proceeding.

19 COMMISSIONER PERNELL: My understanding  
20 is that if state agencies are receiving federal  
21 funds then they are required to abide by those  
22 federal orders, is that -- am I not correct on  
23 that?

24 MR. CRISP: You're correct that state  
25 and local agencies who receive federal funds are

1 required to comply with the Civil Rights Act of  
2 1964.

3 More specifically related to  
4 environmental justice they're required to comply  
5 with Title 6 of the Civil Rights Act of 1964.

6 Compliance with the Civil Rights Act is  
7 one thing, and by the California Energy Commission  
8 receiving federal funds they're required to comply  
9 with that federal law.

10 However, that's not the same as saying  
11 that they're required to do an environmental  
12 justice analysis which is required by Presidential  
13 Executive Order.

14 So the bottomline is since the  
15 requirement of the Executive Order and its  
16 legislative authority comes out of the National  
17 Environmental Policy Act and out of Title 6, and  
18 since there's no corresponding California  
19 Executive Order, or anything like that, there  
20 isn't a requirement for state agencies anywhere in  
21 the United States to address Executive Order  
22 12890.

23 MR. HARRIS: If I could interject  
24 something. It's a pretty complex legal question  
25 that we're dealing with here, but I think in some

1       ways it's mooted because Amanda Stennick for the  
2       staff did her analysis and we've provided Wynnlee  
3       and made him available.

4               So even though it's a voluntary act in  
5       the strictest legal sense, it is taking place  
6       here.

7               HEARING OFFICER GEFTER: And we might  
8       ask the parties, in their briefs, to provide a  
9       legal explanation for the difference between  
10      compliance with Title 6 and the requirement to  
11      comply with the Executive Order. Include  
12      something in your briefs along those lines to  
13      explain it to the Committee.

14              MR. RATLIFF: Yes, we'd be glad to do  
15      that.

16              HEARING OFFICER GEFTER: Thank you.  
17      Does staff have cross-examination of the  
18      applicant's witness?

19              MR. RATLIFF: Well, the hour's late, but  
20      I do have a couple of questions.

21              HEARING OFFICER GEFTER: Please.

22                      CROSS-EXAMINATION

23      BY MR. RATLIFF:

24              Q     When you mentioned Title 6, you are  
25      apparently familiar with the criteria of Title 6,

1 and the Civil Rights Act, as well, and the  
2 guidelines that the Office of Civil Rights uses  
3 regarding Title 6 actions against state agencies.

4 Is there anything concerning the -- I  
5 guess I would ask you if it's your impression that  
6 the criteria that are used for environmental  
7 justice are similar to those that are applied by  
8 the Office of Civil Rights in Title 6 cases?

9 A They are similar.

10 Q Is there any remarkable difference that  
11 you can think of?

12 A Yes, there is a very remarkable  
13 difference. Title 6 and the Civil Rights Act  
14 addresses issues of intentional discrimination  
15 against minorities. It does not address low-  
16 income populations at all.

17 It does not address disproportionate  
18 effect. It strictly addresses issues of  
19 intentional discrimination.

20 On the other hand, the Executive Order  
21 12890 applies both to minorities and to low-income  
22 populations. And the subject of it is the  
23 potential disproportionate distribution of high  
24 and adverse effects, not intentional  
25 discrimination.

1           Q     Thank you.  Is it also your  
2     understanding that the Office of Civil Rights, in  
3     interpreting Title 6 with regard to agency  
4     actions, would require a significant environmental  
5     effect prior to finding that an agency  
6     discriminated?

7           A     I'm not sure that I'm qualified to  
8     answer that question.

9           Q     Okay.  I have another question if I can  
10    only remember what it was.

11                     (Laughter.)

12           MR. RATLIFF:  I lost it somewhere.  
13    Perhaps it's just as well.

14           HEARING OFFICER GEFTER:  The last  
15    question, Mr. Ratliff, perhaps the parties could  
16    address your question in their briefs, because I  
17    believe that required an answer which is based on  
18    a legal analysis.

19           MR. RATLIFF:  I might just add, if I  
20    may, that I do not disagree with the witness'  
21    statements concerning the impact of an executive  
22    order on the duties of states.

23                     Nevertheless, I think it's important to  
24    realize that the staff believes that there's  
25    enough ambiguity in the current state of affairs



1 of the law that the safest thing for the Energy  
2 Commission to do is to comply with the Executive  
3 Order until such time as the dust settles.

4 Right now, that very issue, the issue of  
5 the application of the federal obligation on the  
6 states has not been resolved. And, in fact, it's  
7 not clear where it's going to be resolved.

8 So in the interim period we feel that  
9 it's best that the Energy Commission follow the  
10 environmental justice guidelines in its analyses,  
11 first of all.

12 And second of all, it's probably a good  
13 safeguard for two additional reasons. One of  
14 those being that the state is, itself, going to,  
15 in all likelihood, be developing guidelines for  
16 environmental justice. It may very well  
17 incorporate elements of the federal guidelines.

18 And additionally, as a final  
19 justification, this staff has always been very  
20 concerned in its analyses with the effect on  
21 public health of the projects that have been  
22 licensed. And I think one of the effects of the  
23 environmental justice criteria is to emphasize the  
24 importance of that issue. And for that reason it  
25 comes quite natural to this agency to try to do

1 the outreach that is required, and to also look  
2 seriously at the environmental effect.

3 HEARING OFFICER GEFTER: Thank you. I  
4 think what we might do here is to allow staff to  
5 put on your direct testimony, both the  
6 socioeconomics and the environmental justice  
7 testimony, and then allow the intervenors to  
8 cross-examine the witnesses from both the staff  
9 and the applicant, rather than having repetitious  
10 cross-examination.

11 And if that's all right with all the  
12 parties --

13 MR. RATLIFF: Okay.

14 HEARING OFFICER GEFTER: It seems that  
15 everyone --

16 MR. HARRIS: It's all right with us.

17 HEARING OFFICER GEFTER: -- everyone  
18 agrees to that.

19 MR. MacDONALD: Sure.

20 HEARING OFFICER GEFTER: Let staff go  
21 forward with your direct, and then --

22 MS. POOLE: Hearing Officer Gefter?

23 HEARING OFFICER GEFTER: Yes, CURE.

24 MS. POOLE: Will CURE have an  
25 opportunity to introduce its testimony?

1                   HEARING OFFICER GEFTER: Yes. And, in  
2 fact, the applicant had indicated that they were  
3 going to sponsor testimony, but I believe if a  
4 representative from CURE is here, --

5                   MR. HARRIS: We had expressed a  
6 willingness to do that if necessary, but if the  
7 representative is here, we --

8                   HEARING OFFICER GEFTER: Okay, a  
9 representative is here.

10                  MR. MacDONALD: We also have witnesses.

11                  HEARING OFFICER GEFTER: I understand,  
12 and you'll be able to do your direct witnesses.  
13 I'm trying to think of where it would be  
14 appropriate for CURE. I think probably at this  
15 point. It's out of order, but that way we can,  
16 you know, move on to the environmental justice  
17 issue.

18                  So let CURE move their testimony into  
19 the record.

20                  MS. POOLE: Thank you. We've previously  
21 submitted testimony of Mike Yarborough, who is the  
22 Business Manager of Local 302 of the International  
23 Brotherhood of Electrical Workers.

24                  HEARING OFFICER GEFTER: And we have  
25 that identified as exhibit 64.

1                   MS. POOLE:   Okay.   With Mr. Yarborough's  
2                   testimony we submitted a declaration on his  
3                   behalf.   And I would like to introduce his  
4                   testimony by declaration.

5                   HEARING OFFICER GEFTER:   Is there any  
6                   objection from any of the parties to receiving the  
7                   declaration in lieu of testimony?   Have you seen a  
8                   copy of this?

9                   MR. MacDONALD:   What does it cover?   No,  
10                  I have not seen a copy of it.

11                  MS. POOLE:   This was docketed and served  
12                  on September 20th.   I'd be happy to supply you  
13                  with another copy.

14                  (Parties speaking simultaneously.)

15                  MS. POOLE:   The substance of his  
16                  testimony is the socioeconomic benefits of  
17                  utilizing a local, highly skilled workforce that's  
18                  paid adequate wages and benefits to construct and  
19                  operate the project.

20                  MR. BOYD:   Not environmental justice.

21                  MR. MacDONALD:   But I do have a  
22                  question.

23                  HEARING OFFICER GEFTER:   Off the record.

24                  (Electrical lighting failed.)

25                  (Off the record.)

1 HEARING OFFICER GEFTER: Mr. MacDonald  
2 would like to question the witness on Mr.  
3 Yarborough's declaration.

4 EXAMINATION

5 MR. MacDONALD: Just one question. Does  
6 that declaration give the number of union children  
7 in the City of Pittsburg and Antioch? Children  
8 whose parents belong to unions?

9 MS. POOLE: The declaration does not.  
10 The declaration just swears to the truthfulness of  
11 the testimony.

12 The testimony does not talk about the  
13 children of Local workers.

14 MR. MacDONALD: So do you have any  
15 estimates or how many union families in the City  
16 of Pittsburg and Antioch have children in this  
17 community?

18 MS. POOLE: I'm afraid I don't know the  
19 answer to that.

20 MR. MacDONALD: Do you have any  
21 statistics on the number of union employees of any  
22 type in the City of Pittsburg and Antioch?

23 MS. POOLE: What Mr. Yarborough's  
24 testimony says about the location of union workers  
25 is that CURE's Member Unions have more than enough

1 members within a one-hour commute of the project  
2 to satisfy the project's demand for both  
3 construction workers -- demand for construction  
4 workers.

5 MR. MacDONALD: Would it be  
6 inappropriate for me to ask for that information  
7 from the -- in a brief?

8 COMMISSIONER PERNELL: I'm not sure what  
9 you're asking for, but the matter of union  
10 employees and their family is strictly a matter of  
11 that local. And I'm not sure that you're going to  
12 get how many members, and the members of their  
13 family from those locals.

14 So, I mean you can -- I'm just not sure  
15 that that's -- all of that is private information  
16 for those individuals locals.

17 MR. MacDONALD: Okay, I'll pull back the  
18 request then. Thank you very much.

19 HEARING OFFICER GEFTER: Is there any  
20 objection to the submittal of exhibit 64 into the  
21 record?

22 Hearing no objection, exhibit 64, the  
23 testimony of Michael Yarborough is received into  
24 evidence at this time.

25 MS. POOLE: Thank you very much.

1 HEARING OFFICER GEFTER: Thank you.  
2 We're now ready to move to staff's direct  
3 testimony. And, again, the intervenors will have  
4 an opportunity to cross-examine both the  
5 applicant's and the staff's witnesses. And then  
6 you will also have the opportunity to present  
7 direct testimony.

8 Staff.

9 MR. RATLIFF: The staff witness is  
10 Amanda Stennick. She needs to be sworn.

11 HEARING OFFICER GEFTER: Yes.  
12 Whereupon,

13 AMANDA STENNICK  
14 was called as a witness herein and after first  
15 being duly sworn, was examined and testified as  
16 follows:

17 DIRECT EXAMINATION

18 BY MR. RATLIFF:

19 Q Ms. Stennick, you prepared two pieces of  
20 testimony for this proceeding. The first, I  
21 believe, is socioeconomic resources that is part  
22 of the final staff assessment?

23 A Yes, I did.

24 Q And you also prepared a supplemental  
25 environmental justice data and analyses filed, I

1 believe, November 3rd?

2 A Yes.

3 HEARING OFFICER GEFTER: That would be  
4 exhibit 61?

5 MR. RATLIFF: Exhibit 61, yes.

6 BY MR. RATLIFF:

7 Q Do you have any changes to make in these  
8 testimonies?

9 A No, I do not.

10 Q Are they true and correct to the best of  
11 your knowledge and belief?

12 A Yes.

13 Q Could you summarize them for us?

14 A My testimony on socioeconomic resources  
15 analyzes the effects of project-related population  
16 changes on schools, medical and protective  
17 services, public utilities, public services, and  
18 the issue of environmental justice.

19 In the analysis, on the socioeconomic  
20 analysis I found no significant effects from the  
21 project. Primarily based on the fact that there  
22 is an existing local labor pool from Contra Costa  
23 County and within neighboring counties, Solano and  
24 San Joaquin County, who are more than able to  
25 construct and operate the project.



1                   The environmental justice screening  
2                   analysis indicates that there is no affected  
3                   minority or low-income population. And there were  
4                   no significant and adverse impacts, environmental  
5                   impacts, identified in the other technical areas  
6                   of the project.

7                   Q     Ms. Stennick, you did an earlier  
8                   screening analysis for environmental justice that  
9                   was in your first piece of testimony, in the FSA,  
10                  is that correct?

11                  A     That's correct.

12                  Q     And that screening analysis was  
13                  basically a demographic analysis based on 1990  
14                  census data?

15                  A     That's correct.

16                  Q     And did you supplement that subsequently  
17                  in your second piece of testimony with further  
18                  information?

19                  A     Yes. There were a number of concerns  
20                  raised by the Community of Pittsburgh that the  
21                  environmental justice analysis was inadequate  
22                  because of the 1990 census data.

23                         So I contacted the City of Pittsburgh  
24                         and -- excuse me, the Chamber of Commerce for the  
25                         City of Pittsburgh, and from there I was able to

1       determine a marketing firm which did projections  
2       and estimates for race and Hispanic origin by  
3       census tract, which was the information that would  
4       allow me to do an environmental justice screening  
5       analysis based on most recent estimates based on  
6       census data.

7                   And that's the gist of the supplemental  
8       environmental justice analysis.

9           Q       Does that conclude the summary of your  
10       testimony?

11          A       Well, if you'll refer to the  
12       supplemental testimony, the 1999 projections for  
13       demographics within Contra Costa County census  
14       tracts indicate that there is not the required 50  
15       percent threshold which would trigger a further  
16       environmental justice analysis of the project.

17          Q       Did you look at another criteria that's  
18       listed in the environmental justice Executive  
19       Order guideline criteria concerning significantly  
20       greater populations of protected groups?

21          A       Do you mean for comparison purposes?

22          Q       I know I'm not asking the question very  
23       well. But, --

24          A       Well, the guidelines indicate, actually  
25       they indicate two different -- two indicators of

1       whether there's an affected population. One is a  
2       threshold of 50 percent, and the other is I think  
3       a meaningfully greater than the population in the  
4       affected area.

5               To compare the affected area of the  
6       project, the project's affected area was a five-  
7       mile radius around the project site. Primarily  
8       because it represents the area affected by various  
9       project emissions. If you compare that population  
10      to the overall population in the City of Pittsburgh  
11      it doesn't yield a significantly greater minority  
12      population within the city.

13             Q     I think the language that was eluding us  
14      both at the moment was whether the population  
15      percentage of the affected area is meaningfully  
16      greater than the minority population percentage of  
17      the general population or other appropriate unit  
18      of geographical analysis.

19             HEARING OFFICER GEFTER: And that is at  
20      what page?

21             MR. RATLIFF: Well, that's on page --  
22      I'm reading from the guidelines --

23             HEARING OFFICER GEFTER: Oh, all right.

24             MR. RATLIFF: -- the 1998, April 1998  
25      guidelines for environmental justice, published by

1 EPA. That's page 9 of 43 on a net printout.

2 BY MR. RATLIFF:

3 Q Did the additional data, the  
4 supplemental data that you obtained for this  
5 project in any way change your conclusions?

6 A No, it did not change my conclusions  
7 because both sets of data indicate, the 1990 data  
8 and the 1999 estimates indicate that there is not  
9 a 50 percent threshold of population that would  
10 trigger a further environmental justice analysis  
11 of the project.

12 Q Does that complete your testimony?

13 A Yes.

14 MR. RATLIFF: Thank you.

15 PRESIDING MEMBER KEESE: Mr. Ratliff,  
16 I'd like to ask you a question. I thought I heard  
17 you indicate that you felt that the federal  
18 Executive Order might apply to us?

19 Let me phrase a question. Would what  
20 you're saying be more accurately defined as saying  
21 that provisions similar to those in the Executive  
22 Order might be imposed on the California Energy  
23 Commission by the judicial system at this time,  
24 rather than the explicit federal order?

25 MR. RATLIFF: Obviously I can no longer

1       dodge.

2                   (Laughter.)

3                   MR. RATLIFF: The situation is that in  
4       my belief, and I'm relying basically on people who  
5       I think are more familiar with the federal state  
6       issues than I am, my impression is that executive  
7       orders do not apply to states. That this is a  
8       genuine issue of federal-state authority.

9                   But it's not clear, and the EPA has, in  
10      some respects, behaved in a manner that indicated  
11      that they did, in fact, believe that for the  
12      purposes of the agencies who act in what they call  
13      the federal shoes, environmental justice is  
14      applicable.

15                  And by that I mean air districts who, in  
16      fact, issue PSD permits which are delegated  
17      permits, delegated by the EPA to the agencies.  
18      And in those instances the EPA has -- and here I'm  
19      talking about parts --

20                  MR. MacDONALD: I do have an objection.  
21      He's giving testimony for the EPA --

22                  MR. RATLIFF: No, no, I'm giving legal  
23      opinion here on a legal question.

24                  The EPA, in parts of its organs,  
25      indicated a desire to assume that the districts

1 have that responsibility.

2 PRESIDING MEMBER KEESE: I think I'm  
3 comfortable at this point. It seems pretty clear  
4 on its face that the Executive Order does apply to  
5 federal agencies.

6 I would concur that I think that the  
7 Energy Commission should abide by the general  
8 provisions in there. And I think that's both the  
9 safest course and probably the most rational  
10 course to assume that we're under those guidelines  
11 at this time.

12 But I was just uncomfortable that I  
13 thought the Executive Order might directly apply  
14 to us.

15 COMMISSIONER PERNELL: I agree with  
16 Commissioner Keese, but what I've heard is that if  
17 there's some ambiguity in the law then we should  
18 err on the side of safety here.

19 What concerns me though is that in this  
20 document we have a statement that says, you know,  
21 we're doing this voluntarily and this is a  
22 voluntarily consideration that the CEC is doing.  
23 And that is just one person's opinion.

24 And we have legal staff that has its own  
25 opinion that says that we're doing this correctly.

1       So, I wanted to bring this issue up because I  
2       don't want this to be docketed or perceived as  
3       this is a voluntarily thing that we're doing.

4               I would be interested, though, in more  
5       legal opinions about it. I'm sure that there are  
6       some people in legislative circles that if, in  
7       fact, this is true, would fix it in a hurry.

8               So, I think that staff has done a good  
9       job in evaluating and doing the analysis on this  
10      issue. But, it just concerns me that it comes up  
11      and we have a lot of these cases to do, and a lot  
12      of communities, and we need to be, and which I  
13      think we are, fair and prudent about how we  
14      license these projects, and where we license the  
15      projects.

16              MR. ELLISON: Commissioner, if I can  
17      just clarify what the applicant's position is on  
18      this issue. In the applicant's testimony that the  
19      Commission, in looking at this issue, does so  
20      voluntarily, we did not mean to convey any  
21      objection to the Commission's looking at this  
22      issue. Nor did we mean to convey that if the  
23      Commission looks at this issue it does so in any  
24      way incorrectly.

25              The applicant understands that the

1 Commission is looking at this issue. It supports  
2 the Commission looking at this issue. That's why  
3 we've presented testimony on the question, on the  
4 merits and the substance of the question.

5 We simply want to clarify as to the  
6 question of whether the Commission could be  
7 successfully challenged for doing it differently,  
8 if it did do it differently, which we do not  
9 believe it has done. We believe it's done it  
10 correctly, and done it in accordance with all the  
11 guidelines that apply.

12 But the statement about it being done  
13 voluntarily, I think, was merely to emphasize that  
14 we do not believe the Commission could be  
15 successfully challenged, even if it chose not to  
16 do this at all, or if it did it differently than  
17 the federal agencies are required to do it.

18 Nonetheless, we support the Commission's  
19 approach to this issue. And we believe that staff  
20 has reached the right conclusion.

21 COMMISSIONER PERNELL: Thank you.

22 HEARING OFFICER GEFTER: We're going to  
23 go on to cross-examination. I'm going to first  
24 ask the applicant if you have any cross-  
25 examination of staff's witness?



1 MR. HARRIS: I have a couple questions.

2 HEARING OFFICER GEFTER: All right.

3 CROSS-EXAMINATION

4 BY MR. HARRIS:

5 Q Amanda, I wanted to ask you, make sure I  
6 understand that in the analysis here we've got  
7 three factors that you're looking at and applying  
8 this. And you need the confluence of three  
9 factors, is that correct? You need minority or  
10 low-income population, the high and adverse  
11 impacts, and the disproportionately high and  
12 adverse impacts, is that correct?

13 A That's correct.

14 Q Now, assume I guess in a hypothetical  
15 situation, the -- well, let me back up first.

16 Your findings indicate that based upon  
17 those criteria there is not either a minority or  
18 low-income population affected by the power plant,  
19 is that correct?

20 A That's correct.

21 Q Now, if you were to assume that was not  
22 the case, in fact if you were to assume 100  
23 percent minority population, and 100 percent low-  
24 income population for as broad an area around the  
25 power plant site as you can imagine, if there were

1 no unmitigated impacts associated with that  
2 project, would you still have an environmental  
3 justice issue to deal with?

4 A Well, if there were -- if the entire  
5 five-mile radius was comprised of a population  
6 that was low income and/or minority, you would  
7 have one aspect of an environmental justice  
8 analysis. You would have an affected population.

9 Then the next step would be to determine  
10 whether there was a disproportionate impact, or  
11 high and adverse impact upon that population.

12 Q And I've asked you to assume that  
13 there's no impacts existing. Basically everything  
14 is mitigated to less than significant for this  
15 example.

16 A Well, then according to the guidelines  
17 there would be no environmental justice issue,  
18 because there is no impact.

19 MR. HARRIS: Thank you. That's what I  
20 wanted.

21 HEARING OFFICER GEFTER: Mr. Ratliff,  
22 did I offer you the opportunity to cross-examine  
23 the applicant's witness?

24 MR. RATLIFF: Yes.

25 HEARING OFFICER GEFTER: Okay, so that

1 is taken care of. We can move on to asking the  
2 intervenors if they have any cross-examination of  
3 either the applicant's or the staff's witnesses.  
4 And when you ask your questions, please direct  
5 your question, indicate who you are directing your  
6 question to.

7 Also, does CURE have any questions? Do  
8 you want to participate in this?

9 MS. POOLE: No questions.

10 HEARING OFFICER GEFTER: Thank you.

11 Okay, the first would be Mr. MacDonald at this  
12 point. And that's on behalf of Community Health  
13 First.

14 CROSS-EXAMINATION

15 BY MR. MacDONALD:

16 Q Okay, this is to Calpine and Bechtel.  
17 It's getting late. Okay, what was your analysis,  
18 basically you're saying that there was no impacts  
19 to public education. What was your analysis based  
20 on?

21 MR. BUCHANAN: The basic analysis in  
22 socioeconomic study here is the presumption or  
23 assumption that the project would cause an influx  
24 of a large and potentially temporary work  
25 population.

1                   And with that work population would come  
2           children, families, that would have an adverse  
3           impact on schools.

4                   Given the semi-urban nature of the Bay  
5           Area and its industrial and commercial base, our  
6           analyses show that there would not be an  
7           additional incremental influx of either  
8           construction or operations personnel to support  
9           this project.

10                  These would be people that would be  
11           basically in situ in the area, would have homes  
12           within the one-hour commute radius of the project.  
13           And would already have children in schools  
14           presently. So there would be no incremental  
15           impact.

16                  MR. MacDONALD: What children are  
17           eligible to attend a school district?

18                  MR. BUCHANAN: I don't --

19                  HEARING OFFICER GEFTER: If you don't  
20           know the answer, just say you don't know the  
21           answer.

22                  MR. BUCHANAN: I don't understand the  
23           question, and don't know the answer.

24                  MR. MacDONALD: Okay, our --

25                  MR. HARRIS: Can I object to it on the

1 base of relevance, then.

2 HEARING OFFICER GEFTER: I don't  
3 understand whether that's relevant or not.

4 MR. MacDONALD: Okay, I'll rephrase it.  
5 Okay, are children who are in the school  
6 district boundaries eligible to go to a public  
7 education within those boundaries?

8 HEARING OFFICER GEFTER: I believe that  
9 the witness has already answered the question that  
10 he doesn't have the answer. So, let's move on to  
11 another question.

12 MR. MacDONALD: He doesn't have the  
13 answer to that?

14 HEARING OFFICER GEFTER: He doesn't know  
15 the answer to that. Let's move on.

16 MR. MacDONALD: Okay, can you provide  
17 confirmation from the NAACP that Darnell Turner  
18 was actually representing the NAACP at these  
19 hearings, and not representing himself as a member  
20 of the NAACP?

21 MR. BUCHANAN: Without a direct review  
22 of the record I believe he stated for the record  
23 that he was, in fact, representing the NAACP in  
24 his position, yes.

25 MR. MacDONALD: Right, I'm asking -- no,

1 I'm asking for actual confirmation from the NAACP,  
2 from the president, that he was indeed  
3 legitimately given the authority to represent the  
4 NAACP.

5 MR. HARRIS: I object to this. This was  
6 public testimony, it was not -- or public comment,  
7 I'm sorry, --

8 HEARING OFFICER GEFTER: Okay, Mr.  
9 Harris has objected to that question. I don't  
10 believe again that the --

11 MR. MacDONALD: But it is part of the  
12 record.

13 HEARING OFFICER GEFTER: I don't believe  
14 the -- the individual spoke earlier this evening  
15 and represented himself as a representative of the  
16 NAACP. And that speaks for itself.

17 MR. MacDONALD: But they cited in their  
18 document that Darnell Turner is a representative  
19 of the NAACP. They, in their documents, say that  
20 Darnell Turner is a representative of the NAACP.  
21 And I want them to give me verified documentation  
22 from the NAACP that he actually had the authority  
23 to --

24 HEARING OFFICER GEFTER: What is the  
25 relevance of your question?

1                   MR. MacDONALD: Because if he's a member  
2 of the NAACP and talking for himself, then he is  
3 talking for himself.

4                   If he is a representative of the NAACP,  
5 then he is talking for that --

6                   HEARING OFFICER GEFTER: I understand  
7 what you're saying. What we have on the record is  
8 that he indicated he is a member of the NAACP.  
9 Does the applicant have any other information?

10                  MR. ELLISON: No, we don't, but I can't  
11 imagine a more authoritative statement on this  
12 issue than to produce Mr. Turner -- produce a  
13 gentleman in this hearing tonight who represented  
14 himself as his position in relation to the NAACP.

15                  HEARING OFFICER GEFTER: Yes, we heard  
16 him speak.

17                  MR. ELLISON: I don't know what else you  
18 could possibly do.

19                  HEARING OFFICER GEFTER: We'll move on  
20 to another question.

21                  MR. MacDONALD: So, just for  
22 clarification, so we're accepting that he is the  
23 representative for the NAACP? That's --

24                  HEARING OFFICER GEFTER: That's what he  
25 told us.

1 MR. MacDONALD: All right, thank you.

2 Okay, is there any EPA regulations on  
3 Title 6 that deal with discriminatory impacts?

4 MR. CRISP: Yes. Yes, there are.

5 MR. MacDONALD: That is all the  
6 questions that I have of them. I do have  
7 questions of staff.

8 HEARING OFFICER GEFTER: Go ahead,  
9 please.

10 MR. MacDONALD: Okay. Well, actually I  
11 think that I have some questions for the gentleman  
12 that did talk about EJ.

13 I would direct your attention to the  
14 social resources. This is staff's report, page  
15 277. Laws, ordinances, regulations and standards,  
16 environmental justice.

17 MR. HARRIS: Can he clarify that  
18 reference, page 277 of what?

19 MR. MacDONALD: It's staff's report,  
20 Amanda --

21 HEARING OFFICER GEFTER: Is that Amanda  
22 Stennick's testimony?

23 MR. MacDONALD: Yes.

24 HEARING OFFICER GEFTER: There is no  
25 page 277 in there. Do you have the right page



1       number?

2                   MR. MacDONALD: Well, this may not  
3       actually be a page number. I was thinking this  
4       was a page number, but it is under socioeconomic  
5       resources, environmental justice, under laws,  
6       ordinances, regulations and standards. LORS.

7                   HEARING OFFICER GEFTER: Perhaps you're  
8       talking about page 247, which lists the LORS?  
9       What is your question.

10                  MR. MacDONALD: Okay, well, basically  
11       this states that the EPA subsequent issued  
12       guidelines that require all federal agencies and  
13       state agencies receiving federal funds to develop  
14       strategies to deal with this problem.

15                  And basically above that it says  
16       President Clinton's Executive Order 12898, federal  
17       action to address environmental justice in  
18       minority populations and low-income populations.

19                  Does this disagree with your former  
20       statement that --

21                  MR. HARRIS: I'm going to object to this  
22       on the basis he's asking for a legal conclusion  
23       that we've been asked to brief.

24                  HEARING OFFICER GEFTER: That's right.  
25       The parties will brief this question.

1                   MR. MacDONALD: Okay. Unfortunately,  
2                   this is a very complex problem, and I know that we  
3                   want to get out of here early, but he has  
4                   raised --

5                   (Laughter.)

6                   MR. HARRIS: Too late.

7                   HEARING OFFICER GEFTER: Early in the  
8                   morning.

9                   MR. MacDONALD: Actually, for me it's  
10                  pretty early.

11                  MR. HARRIS: Could you define early,  
12                  please?

13                  (Laughter.)

14                  MR. MacDONALD: Before 3:00.

15                  Okay, just a point of order. I am going  
16                  to testify as a witness to environmental justice,  
17                  basically the EPA guidelines. And a lot of what  
18                  I'm going to be covering would be the questions  
19                  that I would be asking of them.

20                  And rather than going through this with  
21                  each and every one of them, in my testimony I  
22                  could cover my basic assumptions of how I think  
23                  that these rules and regulations are applied.

24                  And I think that would take --

25                  HEARING OFFICER GEFTER: That would be

1 fine, and --

2 MR. MacDONALD: That would be fine?

3 HEARING OFFICER GEFTER: -- way you  
4 don't need to cross-examine.

5 MR. MacDONALD: Okay.

6 HEARING OFFICER GEFTER: Thank you.

7 MR. MacDONALD: All right. I would,  
8 though, like to reserve the right, though, if for  
9 any reason the other intervenors object or bring  
10 up issues that I could have cross-examined them  
11 over, that I do have the right to then recross-  
12 examine them. Is that --

13 HEARING OFFICER GEFTER: You're  
14 referring to the applicant's witness and the  
15 staff's witness.

16 MR. MacDONALD: Yes.

17 HEARING OFFICER GEFTER: That you would  
18 want to recross-examine them?

19 MR. MacDONALD: If there, by chance, was  
20 something that came up with --

21 HEARING OFFICER GEFTER: You will have  
22 an opportunity --

23 MR. MacDONALD: I'm sure they're going  
24 to question me. If there's something that came up  
25 in there that I would have -- just hypothetical.

1 I don't think there's going to be a lot of  
2 questions.

3 HEARING OFFICER GEFTER: Wait. Okay,  
4 let's see what happens.

5 MR. MacDONALD: Okay, all right. Thank  
6 you.

7 HEARING OFFICER GEFTER: Okay, next  
8 is -- Mr. Boyd, do you have questions of the  
9 witnesses?

10 MR. BOYD: Yes, all of them.

11 HEARING OFFICER GEFTER: Please.

12 CROSS-EXAMINATION

13 BY MR. BOYD:

14 Q My first question is just on  
15 socioeconomics. You were talking about the  
16 project site is located in a redevelopment zone in  
17 the City of Pittsburgh, is that correct?

18 MR. BUCHANAN: That is correct.

19 MR. BOYD: Now, as part of  
20 establishing -- are you then saying that it's a  
21 project area within the redevelopment zone?

22 MR. BUCHANAN: It is a development  
23 located within an existing redevelopment area,  
24 yes.

25 MR. BOYD: An existing redevelopment

1 project area, or just a general -- you get what  
2 I'm trying to say, is --

3 MR. BUCHANAN: No.

4 MR. BOYD: -- there's money being spent,  
5 redevelopment money being spent in that area on  
6 some projects?

7 MR. BUCHANAN: By nature of RDAs, RDAs  
8 are defined by parcel number; they're typically  
9 established with a collection of parcel numbers.  
10 You would recognize them as street boundaries,  
11 typically.

12 And the property tax proceeds that are  
13 generated within that boundary are used primarily  
14 for two purposes, infrastructure repair and  
15 development, and for the use of attracting  
16 additional commercial activity to increase the tax  
17 base.

18 MR. BOYD: Okay, now it's my  
19 understanding that to develop a redevelopment  
20 area, in order to do that the first thing you have  
21 to do is declare that area as blighted, is that  
22 correct?

23 MR. BUCHANAN: I believe that's correct.

24 MR. HARRIS: I want to object to this  
25 line of questioning.

1 MR. BOYD: Well, I'm trying --

2 MR. HARRIS: It's --

3 MR. BOYD: -- to establish something  
4 here, and that's why I'm asking these questions.

5 MR. HARRIS: You're asking --

6 HEARING OFFICER GEFTER: Off the record.

7 (Off the record.)

8 MR. BOYD: The fact that this is a  
9 redevelopment zone, does the witness know that  
10 therefore that this is a low-income area?

11 MR. BUCHANAN: I do not.

12 MR. BOYD: Okay.

13 HEARING OFFICER GEFTER: Next question.

14 MR. BOYD: Okay, well, my next question  
15 is -- and this actually covers staff and  
16 applicant.

17 In this document, earlier this evening,  
18 we talked about how to define impact area of  
19 emissions. And I cited on the first page 3-1 --  
20 2, that this little box here, or rectangle, is the  
21 analysis for the air modeling.

22 HEARING OFFICER GEFTER: Okay, wait a  
23 second. This is the testimony of Mr. --

24 MR. RATLIFF: Guido Franco.

25 HEARING OFFICER GEFTER: -- Mr. Franco,

1       so it is exhibit 55.

2               MR. BOYD:   Right.   Right.

3               HEARING OFFICER GEFTER:   And what page  
4       number in exhibit 55?

5               MR. BOYD:   3-2.

6               HEARING OFFICER GEFTER:   3-2, thank you.

7               MR. BOYD:   Okay.   And is there anyone  
8       who disagrees that this is the analysis area?

9               MR. RATLIFF:   Perhaps --

10              HEARING OFFICER GEFTER:   Who are you  
11       asking?

12              MR. RATLIFF:   -- we can ask Mr. Franco.  
13       He's still here.

14              HEARING OFFICER GEFTER:   Mr. Franco is  
15       still here.   He could --

16              MR. BOYD:   Well, I already asked him  
17       these questions.

18              MR. RATLIFF:   Well, then why are you  
19       asking them again?

20              MR. BOYD:   Okay.

21              MR. RATLIFF:   It's almost midnight.

22              MR. BOYD:   Well, basically what I'm  
23       trying to do is --

24              MR. HARRIS:   It's past midnight.

25              MR. BOYD:   Okay, if we look at, once

1       again, page --

2                   HEARING OFFICER GEFTER: I just want to  
3 point out that this is not the air quality  
4 witness. And so if you have a question about air  
5 quality, you need to --

6                   MR. BOYD: I'm not asking a question  
7 about air quality.

8                   HEARING OFFICER GEFTER: Thank you.

9                   MR. BOYD: I'm asking a question about  
10 what the impact area is from emissions from this  
11 project. And the reason I'm raising --

12                   HEARING OFFICER GEFTER: Well, okay,  
13 wait, wait -- stop.

14                   MR. BOYD: -- that is because --

15                   HEARING OFFICER GEFTER: Off the record.  
16 (Off the record.)

17                   MR. BOYD: Okay, the question to staff  
18 and the applicant is do you know that this is, in  
19 fact, the emission impact area from this project?

20                   MR. HARRIS: And I'm going to --

21                   MR. RATLIFF: I object on the grounds  
22 that I don't understand --

23                   MR. BOYD: And it's cited on --

24                   MR. RATLIFF: -- I don't understand what  
25 you mean by that term, the emissions impact area.



1                   MR. BOYD: The emissions in this panel  
2                   are -- I don't even have the right page -- the  
3                   emissions show specifically PM10 on page C-12  
4                   from --

5                   HEARING OFFICER GEFTER: This is exhibit  
6                   55.

7                   MR. BOYD: Exhibit 55, show the pattern  
8                   of distribution of PM10 emissions from the plant.

9                   MR. RATLIFF: Yes.

10                  MR. BOYD: Would the applicant or the  
11                  staff agree that within here is an area that we  
12                  could define as an impact area from these  
13                  emissions?

14                  MR. RATLIFF: I think that question's  
15                  already been asked and answered by Mr. Franco.  
16                  You asked him that and he --

17                  MR. BOYD: That's correct.

18                  MR. RATLIFF: -- said yes. And he also  
19                  added that the emissions were --

20                  MR. BOYD: Levels --

21                  MR. RATLIFF: -- levels were extremely  
22                  low and well below those points of significance.

23                  MR. BOYD: That's fine. I'm not trying  
24                  to establish the level. Just where it's going.

25                  HEARING OFFICER GEFTER: Okay, we're

1 going to go off the record.

2 (Off the record.)

3 MR. BOYD: Okay, once again. Did the,  
4 in the environmental justice analysis completed by  
5 the applicant and by the staff, limit the analysis  
6 to the five-mile radius? Or was it based on the  
7 emission modeling that was performed for this  
8 project, the zone of emission impacts in the  
9 emission modeling?

10 HEARING OFFICER GEFTER: Does the  
11 staff's witness have an answer to that? If you  
12 don't know the answer you can indicate that.

13 MS. STENNICK: Well, it's my  
14 understanding that the five-mile radius around the  
15 project site takes into consideration a number of  
16 potential impact areas from traffic, visual, noise  
17 and air quality.

18 And if you look at the maps that are  
19 part of the supplemental testimony you can see  
20 that you can draw a five-mile circle, you can draw  
21 a ten-mile circle, you can draw a one-mile circle  
22 around this project, and you will not get census  
23 tracts to fall neatly within that five-mile area.

24 There are some census tracts that were  
25 taken into consideration that exceed the five-mile

1 radius.

2 HEARING OFFICER GEFTER: Does the  
3 applicant's witness have anything further to add?

4 MR. CRISP: Yes, actually in my  
5 analysis, when I took it to a finer level of  
6 detail than the screening analysis, even though  
7 there was no apparent necessity to go to a finer  
8 level of detail, I actually took the footprint of  
9 the air quality impact and determined what the  
10 characteristics of the population were that that  
11 footprint lies on.

12 MR. BOYD: And was it the same? Was it  
13 the same result? Did you still come up with less  
14 than 50 percent minority?

15 MR. CRISP: Specifically the highest 24-  
16 hour average PM10 footprint lies on an area that  
17 is less than 50 percent minority.

18 MR. BOYD: Okay.

19 MR. CRISP: The highest annual average  
20 PM10 impact lies in an area that is less than 50  
21 percent minority.

22 And the highest annual average NO2  
23 impact lies in area that is less than 50 percent  
24 minority.

25 So, yes, the conclusion is the same in

1 both the screening analysis and in a finer level  
2 analysis.

3 MR. BOYD: Okay, thank you. That's the  
4 answer I was looking for.

5 Now, the other question I have is in my  
6 rebuttal brief I provided everyone copies of this  
7 information that I received from EPA Region 9;  
8 there were four figures --

9 MR. HARRIS: Can I object first. The  
10 rebuttal is not part of the testimony --

11 MR. BOYD: I understand.

12 MR. HARRIS: -- we're considering  
13 tonight.

14 MR. BOYD: I'm asking if you noticed  
15 this.

16 HEARING OFFICER GEFTER: Okay, wait,  
17 let's --

18 MR. BOYD: Okay, that's why I'm raising  
19 this information --

20 HEARING OFFICER GEFTER: -- let's go off  
21 the record.

22 (Off the record.)

23 HEARING OFFICER GEFTER: Mr. Boyd was  
24 going to sponsor three maps on behalf of  
25 Californians for Renewable Energy. He will wait

1 to sponsor those maps when he presents direct  
2 testimony.

3 In the meantime he has one more question  
4 for the witnesses on cross-examination.

5 MR. BOYD: My question, in the guidance  
6 for incorporating environmental justice concerns  
7 from the USEPA, it identifies that you can, in  
8 your analysis, the selection of appropriate  
9 geographic -- it depends on the unit of geographic  
10 analysis.

11 And they cite in here that you can use  
12 smaller blocks. You can go as small as one census  
13 block in determining whether or not there's an  
14 affected environmental minority population that  
15 would be adversely impacted by this project.

16 Did you consider those smaller  
17 geographical units when you were doing your  
18 analysis?

19 MR. RATLIFF: Mr. Boyd, I --

20 HEARING OFFICER GEFTER: Okay, the  
21 question --

22 MR. RATLIFF: -- I have a question here.  
23 I feel like the problem here is that the language  
24 is being read selectively and out of context.

25 MR. BOYD: I could read other things

1       which would --

2                   HEARING OFFICER GEFTER:   Okay, we're off  
3       the record here.

4                   (Off the record.)

5                   HEARING OFFICER GEFTER:   Mr. Boyd has  
6       another question for the witnesses on cross-  
7       examination.

8                   MR. BOYD:   Just did you consider a  
9       smaller geographical unit in your environmental  
10      justice analysis in analyzing adversely affected  
11      minority populations.

12                  HEARING OFFICER GEFTER:   Okay, first  
13      we'll ask the applicant, do you have an answer for  
14      that?

15                  MR. CRISP:   The answer to that is yes.  
16      In my more detailed analysis, which I explained  
17      that I did, I analyzed the effects at the smallest  
18      unit of geographic analysis for which we could get  
19      data --

20                  MR. BOYD:   Which is?

21                  MR. CRISP:   -- on minority and low  
22      income.   The smallest unit available is the census  
23      block --

24                  MR. BOYD:   Okay, --

25                  MR. CRISP:   -- on minority, it's the

1 census block group for low income. I based my  
2 analysis at the level of the census block for  
3 minority and census block group for low income,  
4 which are the lowest level of analysis where data  
5 are available.

6 HEARING OFFICER GEFTER: Thank you.  
7 Does staff have anything to add?

8 MR. CRISP: Let me further add -- I'd  
9 like to further add that the finer level of  
10 analysis is appropriate at a finer detail level of  
11 investigation. It wouldn't be ordinary at a  
12 screening level, which is what was performed by  
13 the staff.

14 HEARING OFFICER GEFTER: Staff, do you  
15 have anything further to add?

16 (Laughter.)

17 MS. STENNICK: I'll just make it real  
18 simple and say no, I have nothing further to add.

19 (Laughter.)

20 HEARING OFFICER GEFTER: All right,  
21 thank you. Okay. At this point I think that Ms.  
22 Lagana has -- do you have some cross-examination?

23 MS. LAGANA: I do.

24 HEARING OFFICER GEFTER: Ask your  
25 questions, all right.

1 MS. LAGANA: These are going to be easy  
2 questions, I know you can answer them. For the  
3 record, Paulette Lagana with CAP-IT.

4 CROSS-EXAMINATION

5 BY MS. LAGANA:

6 Q So, Doug, what city will the address of  
7 the Delta Energy Center be?

8 MR. BUCHANAN: Pittsburg, California.

9 MS. LAGANA: What a guy! To whom -- to  
10 which city will you be paying all these millions  
11 of dollars worth of property tax?

12 MR. BUCHANAN: To Pittsburg.

13 MS. LAGANA: Ms. Stennick, could you  
14 please tell me what is the population of the --  
15 white population of the City of Pittsburg 1998,  
16 according to your submitted testimony in record?

17 MS. STENNICK: Now, you want to know the  
18 total population --

19 MS. LAGANA: No.

20 MS. STENNICK: -- of the -- the total --  
21 white population, the nonminority population for  
22 the --

23 MS. LAGANA: The white population of the  
24 City of Pittsburg. I figure everything else is  
25 nonwhite, so, what is the white in 1998?



1 MS. STENNICK: It's 18,730.

2 MS. LAGANA: No, percentage, please.

3 MS. STENNICK: Oh, I'm sorry, you wanted  
4 percentage?

5 MS. LAGANA: Please.

6 MS. STENNICK: 36.1 percent.

7 MS. LAGANA: Bingo! Doug, do you think  
8 that's a minority or majority?

9 MR. HARRIS: I'd like to object on the  
10 basis that the analogy she's drawing is different  
11 than the analogy we were drawing before in terms  
12 of impact area. The impact area is not bound by  
13 the geopolitical boundaries in Contra Costa  
14 County.

15 MS. LAGANA: Says who?

16 MR. HARRIS: It's bounded -- says the --

17 HEARING OFFICER GEFTER: Off the record.

18 (Off the record.)

19 HEARING OFFICER GEFTER: Ms. Lagana may  
20 ask the question of the witness.

21 MS. LAGANA: 36.1 percent white  
22 population in the City of Pittsburg. Would you  
23 conclude that that's a minority or a majority?

24 MR. BUCHANAN: I'm going to have to  
25 admit to being distracted while Ms. Stennick

1       answered her cross.  If she could please repeat  
2       her statistics, please?

3               MS. STENNICK:  I was asked what the  
4       percentage of the white population was for the  
5       City of Pittsburgh in 1998, and that was 36.1  
6       percent.

7               MR. HARRIS:  This question is more  
8       appropriately addressed to Mr. Crisp.

9               MS. LAGANA:  I'm sorry, Mr. Buchanan  
10      can't tell me if that's a majority number or  
11      minority number?

12              MR. HARRIS:  Can we go off the record  
13      again?

14              HEARING OFFICER GEFTER:  Yes, we're  
15      going to go off the record.

16              (Off the record.)

17              HEARING OFFICER GEFTER:  Mr. Crisp.

18              MR. CRISP:  And the question is?

19              MS. LAGANA:  Given the statistic that  
20      Ms. Stennick provided, that the white population  
21      of the City of Pittsburgh in 1998 in terms of  
22      percentage is 36.1, would you consider that number  
23      a majority or a minority?

24              HEARING OFFICER GEFTER:  A minority of  
25      what?  Of 100 percent?

1 MS. LAGANA: Of 100 percent.

2 HEARING OFFICER GEFTER: All right.

3 MR. CRISP: I would consider 36 percent  
4 to be a minority of 100 percent.

5 MS. LAGANA: Thank you. I believe that  
6 some of -- is it possible that the people of the  
7 public, the laypeople, the people who may not be  
8 here, but the people to whom this power project  
9 certainly impacts, would look at a statistic like  
10 that and consider themselves a minority community?

11 Would you conclude, any of you on the  
12 panel, that that would be an assumption ordinary  
13 people, not people who have been through this  
14 process, would think?

15 (Laughter.)

16 HEARING OFFICER GEFTER: Okay, we're  
17 going to go off the record.

18 (Off the record.)

19 HEARING OFFICER GEFTER: Okay. The last  
20 question from Ms. Lagana is withdrawn.

21 At this point, does Mr. Boyd want to  
22 present direct testimony or any witnesses? Mr.  
23 Boyd?

24 MR. HARRIS: Susan, I have one more  
25 question for Mr. Crisp.

1 HEARING OFFICER GEFTER: On redirect?

2 MR. HARRIS: On redirect.

3 MR. HARRIS: Go ahead.

4 REDIRECT EXAMINATION

5 BY MR. HARRIS:

6 Q Wynnlee, in terms of your environmental  
7 justice analysis using the federal guidelines, is  
8 the analysis confined strictly to the city limits  
9 of the City of Pittsburg? Is that population  
10 consistent with the federal guidelines?

11 A The characteristics of a population in  
12 any particular geographic or political  
13 jurisdiction really have little to do with whether  
14 there's an environmental justice issue or not.  
15 It's almost like saying what's the percent  
16 minority of New York City. What's the relevance  
17 of that to this project. And the answer is none.

18 The real question is what is the  
19 minority and low-income population of the people  
20 who are affected or potentially affected by the  
21 project. And that information was documented in  
22 Amanda Stennick's testimony. It was confirmed in  
23 my testimony.

24 It was further confirmed in my testimony  
25 through a more detailed analysis, that the

1       population that is affected or potentially  
2       affected by the impacts of this project are less  
3       than 50 percent minority, less than 50 percent low  
4       income, no matter what source of demographic data  
5       you choose to use.

6                   MR. HARRIS:   Thank you.

7                   MS. LAGANA:   Can I have one more  
8       question?

9                   HEARING OFFICER GEFTER:   Yes.

10                  MS. LAGANA:   Okay, it has nothing to do  
11       with numbers.

12                  HEARING OFFICER GEFTER:   Okay.

13                               FURTHER CROSS-EXAMINATION

14       BY MS. LAGANA:

15               Q       Doug, or anyone on the panel, when Tom  
16       Baca stood up and talked about the labor unions  
17       and the agreements, and I know that the Delta  
18       Project has made some agreements with local labor,  
19       but Mr. Baca mentioned in particular there were  
20       some apprentices programs that were going to be  
21       presented to, I guess, you know, to the labor  
22       force from Delta.   At least that's how it sounded  
23       to me.

24                               Are the apprenticeship programs that  
25       Delta will be sponsoring, is that for people

1       during the construction phase? Or is that for  
2       people during the full-term, you know, full-term  
3       job stage? The 24 people who will be hired full  
4       time. And that is an economic issue.

5               MR. BUCHANAN: In regards to Mr. Baca's  
6       comments, the offer that we had made to the  
7       Building Trades was during the construction  
8       period.

9               We -- I presume that we will be offering  
10       training as part of our normal staff rotation and  
11       staff hiring practice that's a normal course of  
12       both initial hire and training promotion.

13               So the assumption can be made that there  
14       will be additional training that will occur to  
15       both bring on new hire and promote them during the  
16       operation and life of the plant.

17               MS. LAGANA: I know that the area where  
18       the labor pool will come from will be within an  
19       hour of the project, is that correct?

20               MR. BUCHANAN: That's correct.

21               MS. LAGANA: Okay, given that the  
22       research that you must have done in order to come  
23       up with that conclusion or that data, is there any  
24       indication as to how many of those 24 full-time  
25       positions might be filled by the pool perhaps

1           within a five-mile radius?

2                   MR. BUCHANAN: I can't state to within a  
3           five-mile radius.

4                   MS. LAGANA: Well, you know, within  
5           Pittsburg, Antioch, this east county area.

6                   MR. BUCHANAN: The presumption that we  
7           have made is that we would be able to staff this  
8           facility easily from the local technical labor  
9           pool. This part of the east county, given the  
10          various other kinds of process facilities in this  
11          part of the county, there are many people with the  
12          kinds of skill sets that we'd be looking for.

13                   So, the presumption is that these  
14          positions would either be people that currently  
15          reside locally. I say local, I'm going to suggest  
16          Pittsburg, Antioch, Brentwood kinds of areas. And  
17          if they didn't reside here now, they would likely  
18          relocate here.

19                   MS. LAGANA: Okay, thanks. Thank you  
20          very much.

21                   HEARING OFFICER GEFTER: Off the record.

22                   (Off the record.)

23                   HEARING OFFICER GEFTER: Mr. Bill  
24          Forrest is here, who's available to give us public  
25          comment.

1                   MR. HARRIS: Susan, one more thing. Can  
2 we go off the record for a second?

3                   HEARING OFFICER GEFTER: Yes, off the  
4 record.

5                   (Off the record.)

6                   MR. FORREST: Madam Chairperson, I would  
7 like to know -- my name is Bill Forrest, and I'm a  
8 resident of this community and have been for a  
9 long time. The majority of my family is here in  
10 the community.

11                   I would like to know before I begin  
12 whether or not my statements will be valid and a  
13 fundamental part of your record, or whether they  
14 will be --

15                   HEARING OFFICER GEFTER: Absolutely.  
16 Your statement will be on the record as a public  
17 comment. And we will listen to what you have to  
18 say and we will consider it.

19                   MR. FORREST: Okay. I initially became  
20 concerned about the project that is being  
21 discussed because I received certain letters of  
22 communication about it from several lawfirms in  
23 San Francisco, as well as I then contacted Calpine  
24 and they sent me two volumes of documentation with  
25 respect to this project, and other projects that



1       they will be initiating in the area.

2               My concern initially was how would that,  
3       in fact, impact me, and why was I actually  
4       receiving notification from law firms, as well as  
5       some administrative law judge issues in San  
6       Francisco.

7               After which I began to talk to other  
8       persons and I went to your first meeting that was  
9       held over at I think the Girls and Boys Club.

10              I would say the qualifications that I  
11       bring to bear, not only as a citizen, but I have a  
12       bachelors degree in social science with a  
13       concentration in employment studies. I have  
14       served the federal government for some eight  
15       years, and the county government for over six  
16       years.

17              I have done, in my employment when I was  
18       with the federal government, extensive demographic  
19       comparative analysis. So I'm vitally interested  
20       in the impact of this project on the low-income  
21       and minority communities, of which a large  
22       percentage of my family belongs. Some here, some  
23       in Antioch.

24              I initially said that I was not going to  
25       come to this because as close to the new year as

1       we're coming I really didn't want to get involved  
2       in any controversy. But I do think, after coming  
3       and listening to a lot of the statements and a lot  
4       of the reports that have been submitted, that this  
5       is a good place to be. And that I wish more of  
6       the public was involved.

7               I'm concerned about a couple of the  
8       presentations that I have heard with respect to  
9       the way that the project analysis has been  
10      conducted. Specifically, I know, from doing any  
11      sort of demographic analysis or comparative  
12      analysis, that it depends on the scope of the  
13      geographic area with which you do your analysis,  
14      the kind of data that you can extract from it.

15             When we speak about concerns about the  
16      east wind and the west wind, I know that many of  
17      my former employees and colleagues live -- if the  
18      wind blows toward Antioch, they live in the  
19      fairgrounds area, which is a very low-income area.  
20      I know that if the wind blows back west from the  
21      project that there is an extensive low-income area  
22      and minority community in that particular area.

23             I know if it kind of varies over toward  
24      Highway 4 that you have an enormous amount of  
25      minority, senior citizens, and low-income persons.

1                   So I really would like to look at those  
2           demographic analyses that justify this project to  
3           see whether or not they have what I consider to be  
4           content validity. And that's not to question the  
5           value of the analyses. I just would like to see  
6           and be assured for myself.

7                   I want to thank those that got me to the  
8           meeting tonight, Jim specifically. I think that,  
9           in my opinion, since I can put my personal opinion  
10          on the record, I'm not exactly sure whether or not  
11          we would have two major projects like this in our  
12          city if, in fact, there was the kind of outrage or  
13          response to it.

14                  But the people that will be affected  
15          most by this project are those that are least able  
16          to articulate their concerns. I am hopeful that  
17          many of the presentations that were made tonight  
18          indicating that this will be a safe and sound and  
19          low-noise project will, in fact, be the case.

20                  Because I do think that you may be  
21          having a disparate impact. Now, we speak to the  
22          issue of disparate impact, there are situations  
23          and developments in positions that people take  
24          that may, on their surface, appear to be neutral.

25                  But, if, in fact, they have a disparate

1       impact on a protected class group, then you run  
2       into a problem.

3               So those are my particular concerns.

4       And I don't have an organized presentation. I  
5       know that you are tired, probably over-worked and  
6       under-paid, and it is late in the evening. And I  
7       left my three-month-old grandson just to come down  
8       here and to make somewhat of a presentation.

9               I'm not going to hold you long, but I  
10       will say if, in fact, and I do believe this  
11       project will probably go forth, you must, by all  
12       means, do what is required in the State of  
13       California.

14              I heard some comment about Texas. Well,  
15       I love Texas, but in fact if the requirements in  
16       California are a little more stringent, and they  
17       require a little more to do and a little more  
18       expense, you must, as we move into the 21st  
19       century, insure this community that we will be  
20       safe and sound.

21              As far as I'm concerned if one person is  
22       stricken with cancer, that's more than enough. So  
23       we need to make the kind of assurances that will  
24       insure that this is a safe and a sound project.  
25       That it does not have a disparate impact upon

1       those that are least able to stand up and speak  
2       out. And those are things that I'm concerned  
3       about.

4                   And that's about all I have to say  
5       tonight. And that's my position.

6                   HEARING OFFICER GEFTER: Thank you very  
7       much.

8                   MR. FORREST: Thank you.

9                   COMMISSIONER PERNELL: Thank you.

10                  PRESIDING MEMBER KEESE: Thank you.

11                  MR. HARRIS: Thank you.

12                  MR. MacDONALD: Thanks, Bill.

13                  HEARING OFFICER GEFTER: Okay. Now I  
14       understand, Mr. Boyd, that you also want to  
15       present the testimony of Mr. MacDonald, and again,  
16       we don't have written testimony of Mr. MacDonald,  
17       so we're going to go off the record to discuss it.  
18       Off the record.

19                  (Off the record.)

20                  HEARING OFFICER GEFTER: Mr. Boyd, are  
21       you going to introduce Mr. MacDonald as your  
22       witness?

23                  MR. BOYD: I'd like to introduce Mr.  
24       MacDonald as my witness, a Trustee of the  
25       Pittsburg Unified School District.

1 HEARING OFFICER GEFTER: Mr. MacDonald,  
2 will you be sworn.

3 MR. MacDONALD: Yes.  
4 Whereupon,

5 JIM MacDONALD  
6 was called as a witness herein and after first  
7 being duly sworn, was examined and testified as  
8 follows:

9 HEARING OFFICER GEFTER: Would you  
10 please identify yourself.

11 MR. MacDONALD: My name is Jim  
12 MacDonald. I am a current Trustee of the  
13 Pittsburg Unified School District. I want to make  
14 it clear that while I am a Trustee of the  
15 Pittsburg Unified School District, I am not  
16 representing the Pittsburg Unified School  
17 District. I do not have the authority granted to  
18 me by the Pittsburg Unified School District to  
19 represent them in this hearing.

20 MR. HARRIS: Question, then. Is this  
21 lay opinion, then? Is that what he just  
22 stipulated to?

23 MR. BOYD: On what?

24 MR. MacDONALD: No. I just stipulated  
25 that I don't have the authority to represent the

1 Board.

2 MR. HARRIS: So my question is --

3 HEARING OFFICER GEFTER: Off the record.

4 (Off the record.)

5 HEARING OFFICER GEFTER: Okay, now ask  
6 your question, Mr. Boyd.

7 DIRECT EXAMINATION

8 BY MR. BOYD:

9 Q Okay, you're a Trustee on the School  
10 Board. Are you aware of the resolution calling  
11 for establishing -- calling on EPA to establish  
12 Pittsburg as an environmental justice area?

13 A Yes.

14 HEARING OFFICER GEFTER: And this  
15 document is identified as exhibit 69.

16 BY MR. BOYD:

17 Q The document --

18 A Yes, I am.

19 Q And did you vote on this?

20 A Yes, I did.

21 Q And how did you vote?

22 A I voted for it.

23 Q And what was the vote of the Board on  
24 this matter?

25 A We had a four for it, and one was

1 absent.

2 Q Okay.

3 HEARING OFFICER GEFTER: Okay, that  
4 concludes your testimony on this document. Okay.  
5 Do you move to --

6 MR. MacDONALD: And I will provide -- I  
7 will let the record note that I will be providing  
8 a brief on this matter, and citing it in my  
9 testimony on environmental justice.

10 HEARING OFFICER GEFTER: Citing it in  
11 your brief, okay.

12 MR. BOYD: Okay, and one other question  
13 I need to ask --

14 HEARING OFFICER GEFTER: All right, do  
15 you --

16 MR. BOYD: -- on this.

17 MR. ELLISON: Are we on the record at  
18 this point?

19 HEARING OFFICER GEFTER: Yes, and at  
20 this point do you move to offer this document into  
21 evidence?

22 MR. MacDONALD: Yes.

23 HEARING OFFICER GEFTER: Is there any  
24 objection? Hearing no objection, --

25 MR. ELLISON: Okay, we don't object to



1       it coming in, but let me ask a question here. You  
2       said the vote was four-four and one abstention?

3               MR. MacDONALD: No, no, it four with  
4       one -- there's only five Board members. One was  
5       absent. So we had four affirmatives and one  
6       absent.

7               HEARING OFFICER GEFTER: All right.

8               MR. MacDONALD: We did --

9               HEARING OFFICER GEFTER: Hearing no  
10       objection, exhibit 69 is now received into the  
11       record.

12               Mr. Boyd, do you have another exhibit  
13       that you would like to offer?

14               MR. BOYD: Yes, but first I have a  
15       question I need to ask about the environmental  
16       justice.

17               MR. BOYD: Do you know of any other  
18       agency in the --

19               MR. HARRIS: I'm objecting on the basis  
20       that I don't have any idea where he's headed, and  
21       we had the --

22               MR. BOYD: -- County that has -- I just  
23       want to ask if anyone -- other public agencies in  
24       the area has also --

25               MR. HARRIS: Can we go off the record,

1 Susan?

2 HEARING OFFICER GEFTER: Off the record.

3 (Off the record.)

4 HEARING OFFICER GEFTER: We're moving  
5 on. The last question will not be asked. In  
6 fact, we can strike it. If you could strike the  
7 last question from the record.

8 Mr. Boyd, do you have another question  
9 of this witness?

10 MR. BOYD: Yes. Are you -- Jim, are you  
11 familiar with these three maps from the EPA, one  
12 which shows the minority distribution, one which  
13 shows in the vicinity of the proposed project, one  
14 that shows the percentage of population living  
15 below the poverty level, and one showing the  
16 nonregulated sites, other EPA regulated sites in  
17 the vicinity of the project?

18 MR. MacDONALD: Yes, I am.

19 HEARING OFFICER GEFTER: All right, and  
20 those three maps are going to be exhibit 77.

21 MR. BOYD: Could you please state for  
22 the record where these maps came from?

23 MR. MacDONALD: Okay, these are EPA  
24 maps, basically, --

25 MR. BOYD: Who provided them to you?

1                   MR. MacDONALD: The Environmental  
2                   Justice Agency of Region 9. These came from the  
3                   USEPA Region 9 GIS Center September 28, 1999.

4                   MR. HARRIS: And we'll stipulate to the  
5                   maps being from EPA.

6                   MR. MacDONALD: These are compiled from  
7                   the 1990 census.

8                   We have one map here, percentage of  
9                   population living below the poverty level by  
10                  census block. This definition of below the  
11                  poverty line is self explanatory. Thank you.

12                  MR. RATLIFF: Jim, do you have a density  
13                  map, too? Because we --

14                  MR. MacDONALD: Yes, you need an extra  
15                  one?

16                  MR. RATLIFF: Because if you're going to  
17                  put in the other ones, we'd like you to put in the  
18                  density map, as well.

19                  MR. BOYD: Okay, I would like to request  
20                  that I then be allowed to include my fourth, the  
21                  fourth, which is actually -- I originally said it  
22                  was the threatened and endangered species and the  
23                  applicant objected because that hearing's already  
24                  closed. But it also identifies the population  
25                  density per square mile by census block.

1                   And for that reason I would like to  
2                   include it as well, if there's no objection.

3                   HEARING OFFICER GEFTER:   Okay, that can  
4                   be included.

5                   Okay, I understand the applicant has  
6                   stipulated that these maps are from the EPA.   And  
7                   I don't think we need to go any further.   The maps  
8                   speak for themselves.

9                   MR. MacDONALD:   Thank you.

10                  HEARING OFFICER GEFTER:   Thank you.  
11                  Okay, now the witness may be excused.   Mr.  
12                  MacDonald, you are no longer testifying, but you  
13                  may make public comment, as we agreed off the  
14                  record.

15                  MR. MacDONALD:   Okay, thank you.   I will  
16                  make this brief.   Again, I am a Trustee of the  
17                  Pittsburg Unified School District.   I have been  
18                  concerned about the health and welfare of our  
19                  children and our society.

20                  It's basically well known, it's a  
21                  medical fact, that childhood hunger is not as  
22                  simply as a moral issue, scientific evidence  
23                  suggests that children who are hungry are less  
24                  likely to become productive citizens.

25                  A significant body of medical data

1 provides compelling evidence that hungry children,  
2 even those who experience only milk malnutrition  
3 during the critical stages of their development  
4 may suffer negative, life-altering consequences.

5 Children who are denied an adequate diet  
6 may suffer abnormal brain and physiological  
7 development which, if not corrected, can be  
8 irreversible. Hungry children have a harder time  
9 learning in school. They have shorter attention  
10 spans. And suffer more absences due to illness.

11 A child who is unequipped to learn  
12 because of hunger and poverty is more likely to be  
13 poor as an adult.

14 And the reason I bring this to your  
15 attention is because there's been some question  
16 about the school district, one, why do we care  
17 about the health and welfare of our children. We  
18 should only be considering their education and not  
19 worry about it, it's not our jurisdiction, it's  
20 not our problem. It's irrelevant.

21 And I would counter that it is relevant.  
22 The school district does have a free and reduced  
23 lunch program. That program is not a gift of  
24 public funds. A gift of public funds, by public  
25 officials, is a crime. And if we were simply

1 giving money to these people to feed their  
2 children for no scientific reason, the district  
3 and the state could be definitely brought charges  
4 against us.

5 The reason that we offer free and  
6 reduced lunch is because we realize that these  
7 parents do not have the income to properly feed  
8 their children. And that results in learning  
9 disability problems.

10 I want to quickly go over some of the  
11 environmental justice protection guidelines. It  
12 was stated that this was voluntary. I'd first  
13 like to -- socioeconomic resources, environmental  
14 justice, basically it's -- President Clinton --  
15 and this is from staff -- President Clinton  
16 Executive Order 12898, federal action to address  
17 environmental justice in minority populations and  
18 low-income populations was signed on February 19,  
19 1994.

20 The order requires that the U.S.  
21 Environmental Protection Agency and all other  
22 federal agencies develop environmental justice  
23 strategies. This is the quote that we basically  
24 hear all the time in these proceedings. But what  
25 we don't hear is the following:

1                   The U.S. EPA subsequently issued  
2                   guidelines that require all federal agencies and  
3                   state agencies receiving federal funds to develop  
4                   strategies to address this problem.

5                   So while it is true that Executive Order  
6                   12898 does not directly relate to states, it does  
7                   relate to the EPA and it requires the EPA to act.  
8                   The EPA, in its responsibility to Executive Order  
9                   12898, has passed guidelines that any federal --  
10                  anybody receiving federal funds must consider  
11                  environmental justice.

12                  So, in reality, everybody that -- state  
13                  agencies or any agency that receives federal funds  
14                  must, in fact, talk about environmental justice.

15                  Just to hit a few highlights here. One  
16                  of the problems I have with the Bay Area Air  
17                  Quality Management District is the fact I believe  
18                  that their programs are basically unfair to  
19                  minorities and low income. Their program of  
20                  allowing air pollution credits to be bought  
21                  anywhere, and saying while basically while the  
22                  general air pollution is not consistent with  
23                  environmental justice protection agency final  
24                  guidance.

25                  I bring this to your attention. The

1 goal of this fair treatment is not to shift among  
2 populations but to identify potential  
3 disproportionately high and adverse effects, and  
4 identify alternatives that may mitigate these  
5 impacts.

6 So, what the Bay Area Air Quality  
7 Management District is doing when it allows  
8 industries to buy pollution credits outside of  
9 this community is they're shifting pollution from  
10 middle, upper class areas to low income and  
11 minority communities.

12 I do want to go step-by-step on this.  
13 There's just a few other major -- okay. 2.1.1  
14 minority and minority populations. This is  
15 basically the identification of minority and  
16 minority populations.

17 And it does start out saying that the  
18 affected area, 50 percent of the affected area.  
19 But what is important is what the definition, or  
20 how do you determine the affected area.

21 And basically what they are saying here  
22 is I will state just part of this, is clearly a  
23 key element here is the selection of the  
24 appropriate level of geographic analysis. That is  
25 selecting a comparison population to which the



1 population in the affected area will be compared  
2 to, identify if they are meaningfully greater  
3 percentages.

4 And they go on to discuss the fact that  
5 if you use large areas, if you use areas such as  
6 census tracts, the fact that census data can only  
7 be disaggregated to certain prescribed levels,  
8 e.g. census tracts, census blocks, suggests that  
9 pockets of minority and low-income communities,  
10 including those that may be experiencing  
11 disproportionately high and adverse effects may be  
12 missed in a traditional census tract based  
13 analysis.

14 Now, what they are saying is -- this is  
15 a map the EPA has done. And this map is done by  
16 census blocks. Okay, actually it's easier to see  
17 the 75 to 100 percent. That's the very dark  
18 purple.

19 Okay, the definition of a community in  
20 this document is basically a population could be  
21 three individuals. You can talk about the school  
22 population, you can talk about the minority  
23 population, that is the definition of a  
24 population. It is not the City of Antioch and  
25 Pittsburg and Bay Point and Concord and Clayton

1 all put together, and that's a population. That  
2 is not the definition of a population.

3 If you look in the dictionary you will  
4 find that, you know, a group of individuals is a  
5 population.

6 So what you are to do is to identify the  
7 group, the populations, the communities. EPA,  
8 every one of these little squares that are dark  
9 colored, that is a minority group. That is a  
10 community in the definition of EPA.

11 This little spot right down here has to  
12 be considered a minority community. This has to  
13 be considered a minority community. If you look  
14 at this map and this is from 1990, you see that  
15 there are a lot of minority communities, and we're  
16 just talking about 75 to 100 percent minority,  
17 that have to be considered under environmental  
18 justice.

19 If you look at the statistics that are  
20 coming out, the number of minorities and low  
21 income, particularly minorities, has gone up quite  
22 a bit. So I would suspect if we were to do a map  
23 we would see more in the Antioch area, more  
24 minority groups that need to be identified.

25 HEARING OFFICER GEFTER: Mr. MacDonald,

1       how much more do you have?

2                   MR. MacDONALD:  I just have a few more  
3       minutes, just -- I mean just a little bit.

4                   In that identification of minority  
5       groups they talk about are there lead pipes in the  
6       ground which these groups, these what are  
7       identified here, these are the type of things you  
8       need to take into account.

9                   Are they subsistent farming or feeding,  
10      do they rely on fishing.  These are things that  
11      you need to take into account when doing your  
12      analysis.

13                  Even though this particular census is by  
14      census block, if you read it they tell you that  
15      even a census block may be too big of an area to  
16      determine whether or not you have a minority  
17      community.

18                  Now, if you look at what they are  
19      presenting you, and this will be my last statement  
20      after I find it, --

21                  HEARING OFFICER GEFTER:  While Mr.  
22      MacDonald is looking for the rest of his  
23      statement, I wanted to say on the record that we  
24      need to go over the exhibits before we close, and  
25      so if the parties could take a look at their

1 remaining exhibits and be prepared --

2 MR. BOYD: He's got it.

3 MR. MacDONALD: I got it.

4 HEARING OFFICER GEFTER: Okay, Mr.

5 MacDonald, you're ready to proceed? And can you  
6 wind it up pretty quickly?

7 MR. MacDONALD: Yeah, I just want to  
8 show that --

9 HEARING OFFICER GEFTER: Thank you.

10 MR. MacDONALD: -- I just want to show  
11 that these maps -- this is a map done, let me get  
12 the one that's the same as the 1990 one -- this is  
13 a map that's done by census tracts. And this is  
14 the type of aggregation that you get from doing  
15 census blocks -- tracts, excuse me.

16 You can see the difference. In just  
17 doing blocks, you identify at least 10 or 12  
18 different minority communities in Pittsburgh. In  
19 doing census blocks -- tracts, excuse me, and  
20 taking the whole complete area and saying, well,  
21 we have more Caucasians than we have minorities.  
22 Well, that's the definition of minorities.

23 I mean you're saying what the definition  
24 of minorities is. So if, gee, if we have  
25 minorities in there, we can't consider them

1       because they're minorities. It just doesn't make  
2       sense.

3                   Thank you very much.

4                   HEARING OFFICER GEFTER: Thank you very  
5       much.

6                   MR. FORREST: I have a question.

7                   HEARING OFFICER GEFTER: Off the record.

8                   (Off the record.)

9                   HEARING OFFICER GEFTER: Early in the  
10       proceeding, before Mr. Forrest made his comments,  
11       Mr. Boyd objected to the Committee not allowing  
12       Mr. Forrest to testify as a witness.

13                   And I indicated to Mr. Boyd that I would  
14       say on the record that the Committee rules that  
15       Mr. Forrest could make public comment, but could  
16       not testify, because he had not filed any previous  
17       testimony for us to review before we got here this  
18       evening.

19                   MR. BOYD: I did file -- you should  
20       state that I did give you a copy of his --

21                   HEARING OFFICER GEFTER: Mr. Forrest did  
22       not give us any testimony. We do have Mr.  
23       Forrest's r, sum,, which is --

24                   MR. BOYD: Okay.

25                   HEARING OFFICER GEFTER: -- it's

1 identified as exhibit 70, and if Mr. Boyd wants to  
2 move Mr. Forrest's r,sum, into the record you're  
3 welcome to make that motion.

4 MR. BOYD: Yes, I would like his r,sum  
5 to --

6 HEARING OFFICER GEFTER: Is there any  
7 objection to Mr. Forrest's r,sum,?

8 MR. HARRIS: No.

9 HEARING OFFICER GEFTER: Okay. Exhibit  
10 70 is received into evidence at this time.

11 Now, we're going to close the record on  
12 socioeconomics, and we're going to move on to the  
13 conclusion of tonight's hearing.

14 And the first thing we need to do is to  
15 review all the exhibits and make sure that nay  
16 remaining exhibits that you intend to introduce  
17 into the record are now received.

18 And I'll ask the applicant to go through  
19 your list at this time.

20 MR. HARRIS: Okay. See if I can go  
21 ahead and start with the ones we're going to move  
22 in.

23 Exhibit 1 is the compilation of  
24 testimony excluding air quality, soil and water.  
25 And we've introduced that in segments as we've

1 moved forward, and I'd like to now at this point  
2 move the entire document into evidence.

3 HEARING OFFICER GEFTER: We're going to  
4 move all of your documents at one time. Just go  
5 through and tell us which ones.

6 MR. HARRIS: Okay. So exhibit 1.  
7 Exhibit 2 is the volume I and volume II of the  
8 AFC.

9 There was some confusion on our end as  
10 to whether exhibits 51 and 53 were actually  
11 admitted into evidence. I believe they were, but  
12 just to safeguard that, I want to make sure we  
13 move those into evidence.

14 HEARING OFFICER GEFTER: All right, I  
15 don't have them, so let's include them on your  
16 list.

17 MR. HARRIS: Okay. Just a point of  
18 clarification. I believe exhibit 72, the  
19 resolution from the City of Pittsburgh was accepted  
20 into evidence, but if not, I'd like to move that  
21 into evidence now.

22 And also 76, the City of Pittsburgh  
23 letter to Chairman Keese.

24 Again, I believe those are both already  
25 accepted, but it was hours ago, so as a matter of

1       caution we'll take that.

2               I believe that's it in terms of  
3       applicant's documents.

4               HEARING OFFICER GEFTER: Thank you. Is  
5       there any objection to exhibits 1, 2, 51, 53, 72  
6       and 76 being received into evidence?

7               MR. RATLIFF: No.

8               HEARING OFFICER GEFTER: They are now  
9       received.

10              Mr. Boyd, before you leave, you had a  
11       number of exhibits that you had identified for the  
12       record, and I wanted you ask you if you wanted to  
13       move them in.

14              MR. BOYD: Okay.

15              HEARING OFFICER GEFTER: All right.

16              MR. HARRIS: We're not done, yet.

17              HEARING OFFICER GEFTER: Okay, I know  
18       you're leaving so let's go through. Exhibit 62,  
19       which is your testimony, do you want to move that  
20       into the record?

21              MR. BOYD: Yes.

22              HEARING OFFICER GEFTER: Any objection?

23              MR. HARRIS: No.

24              HEARING OFFICER GEFTER: Okay, exhibit  
25       62 is moved into the record.



1                   You also had from Community Health  
2           First, I don't know where Mr. MacDonald is,  
3           representing Community Health First, but --

4                   MR. BOYD:   We moved just two documents.

5                   HEARING OFFICER GEFTER:   Yeah, exhibit  
6           65 and then there was another exhibit 67 and 68.

7                   MS. LAGANA:   And 75.

8                   HEARING OFFICER GEFTER:   And 75.   Okay,  
9           is there any objection to any of those documents?

10                  MR. HARRIS:   What were the numbers,  
11           again, I'm sorry?

12                  HEARING OFFICER GEFTER:   65, 67 and 68,  
13           which I think --

14                  MR. HARRIS:   No objection.

15                  HEARING OFFICER GEFTER:   No objection.  
16           And also 75.

17                  MS. LAGANA:   And 77, which is the three  
18           maps.

19                  HEARING OFFICER GEFTER:   And 77, which  
20           are the three maps.   Thank you.

21                  MR. HARRIS:   And 75 was that --

22                  MR. BOYD:   Four maps, remember?   Four  
23           maps.

24                  HEARING OFFICER GEFTER:   Four maps.  
25           You're right.   Four maps.   All right, hearing no

1 objection to those documents, they're now received  
2 into the record. Thank you.

3 That's it.

4 MR. BOYD: Okay, thank you very much.

5 HEARING OFFICER GEFTER: Thank you. And  
6 then, staff, you have some remaining documents  
7 that need to be moved into the record.

8 MR. RATLIFF: Yes, we had 61, I believe  
9 that's the only one.

10 HEARING OFFICER GEFTER: Yes. If I find  
11 that any other document has not been received I'll  
12 let you know. I think pretty much everything  
13 that --

14 MR. HARRIS: We have a couple of -- I  
15 think a couple, we want to make sure actually, and  
16 actually a point of clarification on the last set  
17 of documents. Number 75 was actually sponsored by  
18 Calpine/Bechtel.

19 HEARING OFFICER GEFTER: It is sponsored  
20 by the applicant. And you did move that into  
21 evidence earlier on.

22 MR. HARRIS: It is part of the record.

23 HEARING OFFICER GEFTER: It was  
24 sponsored by applicant. Also, staff, there are  
25 two documents, 73 and 74. 73 is the letter from

1 BAAQMD to the staff. It was the errata to the  
2 FDOC. And I don't know if we actually received  
3 that into the record. That's 73.

4 74 was the average maximum PM10  
5 concentrations, which was a table that was used, I  
6 believe, in Mr. Franco's testimony.

7 MR. RATLIFF: That's right, it's --

8 HEARING OFFICER GEFTER: All right, so  
9 exhibits 73 and 74 are now received into evidence,  
10 hearing no objection, they are received into  
11 evidence.

12 MR. HARRIS: There are a couple other  
13 ones I think we believe that staff needs to move  
14 in still. I don't know that staff moved in  
15 Amanda's testimony, which is number --

16 HEARING OFFICER GEFTER: Okay, staff  
17 needs to move exhibit 20, which is the FSA.  
18 That's not part of the record yet.

19 MR. HARRIS: Was Amanda's testimony  
20 moved in?

21 HEARING OFFICER GEFTER: Amanda's  
22 testimony was just received.

23 MR. HARRIS: I'm sorry.

24 MR. RATLIFF: We haven't moved exhibit  
25 20 in?

1 HEARING OFFICER GEFTER: No, you  
2 haven't.

3 MR. RATLIFF: Oh. Then we do want to do  
4 that.

5 HEARING OFFICER GEFTER: Yes. Okay.  
6 The final staff assessment, which is exhibit 20,  
7 is now received into the record.

8 Okay, any other documents?

9 MR. HARRIS: Part 2 of the final staff  
10 assessment, as well, did that get moved in,  
11 Magdy's air quality?

12 HEARING OFFICER GEFTER: What number is  
13 that? Number 54.

14 MR. RATLIFF: Yeah, that got moved in.

15 HEARING OFFICER GEFTER: That's received  
16 in evidence.

17 MR. HARRIS: Okay. Anything else, the  
18 PDOC, FDOC? I think the CURE document, as well,  
19 the socioeconomic testimony by CURE was moved in,  
20 but if not --

21 HEARING OFFICER GEFTER: Yes, it was.

22 MR. HARRIS: Okay. And then the FDOC  
23 and the PDOC were also moved in, is that correct?

24 HEARING OFFICER GEFTER: Yes.

25 MR. HARRIS: Because if they weren't I'd

1       move them in now.

2                   HEARING OFFICER GEFTER:  Yes, they're  
3       received.  We have those received, 58 and 59  
4       received into the record.  And also the PDOC,  
5       which is 56, that's received into the record.

6                   So I think we have everything here.  If  
7       we look at the transcripts and discover that one  
8       of the documents has not been received, let me  
9       know.

10                  MR. HARRIS:  Okay.

11                  HEARING OFFICER GEFTER:  All right, the  
12       next thing that we need to look at is the  
13       schedule.  Originally we had the briefs due on  
14       November 24th.  It's clear that the transcript  
15       will not be turned around overnight.  In fact, we  
16       probably --

17                  (Laughter.)

18                  HEARING OFFICER GEFTER:  Since we have  
19       no more night, we're going to -- I probably expect  
20       the transcript, we wouldn't probably have it till  
21       next week sometime.

22                  So, we're going to extend the briefing  
23       schedule to --

24                  (Electricity failure.)

25                  HEARING OFFICER GEFTER:  At this point I

1       was going to extend the briefing schedule to  
2       November 30th. And if there's a problem with  
3       getting the transcript prior to that, you know,  
4       that time, we'll extend the time.

5               The other thing that is a concern is the  
6       business meeting that we're aiming for -- and this  
7       point, you know, we're going to try as much as we  
8       can to get you to the end, you know, get you a  
9       business meeting in January.

10              We just have to see what happens, but  
11       we're working on it.

12              MR. HARRIS: Just for emphasis, like you  
13       need it, that's a very important date for us, and  
14       we will do everything that we can in our powers to  
15       help facilitate the drafting of documents and  
16       getting everything in.

17              Holding that deadline is actually  
18       paramount to financial closing and a whole bunch  
19       of other issues. And so it's very important.

20              HEARING OFFICER GEFTER: The Committee  
21       is very aware of the applicant's concern for a  
22       date, and we are trying to do our best to get you  
23       that date. And we'll see how that goes.

24              There was a document files by CAP-IT  
25       entitled, a request for declaratory judgment.

1 Staff was preparing to answer those questions  
2 orally, and I don't know how much time it's going  
3 to take. If you want to do that orally, or do you  
4 want to respond in writing. If you feel like you  
5 can do it quickly, --

6 MR. RATLIFF: I think we can do it  
7 quickly.

8 HEARING OFFICER GEFTER: All right.  
9 It's already 2:00 in the morning. We might as  
10 well keep going and get it taken care of.

11 (Laughter.)

12 MR. RICHINS: I saw a film about this  
13 one time. Nobody could leave the party --

14 HEARING OFFICER GEFTER: So why don't,  
15 on the record why don't we ask Mr. Richins to  
16 address CAP-IT's request for declaratory judgment,  
17 which are a series of questions that she submitted  
18 to us.

19 And, for the record, as well, the  
20 Committee believes that this is entitled request  
21 for declaratory relief is misnomered. That it is  
22 more in the nature of interrogatories that staff  
23 is willing to answer.

24 MS. LAGANA: It's more what?

25 HEARING OFFICER GEFTER: It's a

1 misnomer. This is -- your questions are more in  
2 the manner of a series of interrogatories that the  
3 staff is willing to respond to. And they'll go  
4 forward right now and try to answer your  
5 questions.

6 MS. LAGANA: Thank you very much.

7 HEARING OFFICER GEFTER: Thank you.

8 MR. RICHINS: I won't read the questions  
9 beforehand, I'll just indicate briefly what the  
10 question asked.

11 Number one, the first question asked  
12 regarding two plants in the same city, has that  
13 happened in the past, and what are the policies of  
14 the Energy Commission regarding that.

15 The Energy Commission, regardless of how  
16 many plants there are in the area, does a complete  
17 and thorough analysis to determine whether  
18 significant impacts. We look at over 22 different  
19 technical areas, and identify whether there are  
20 any significant environmental impacts.

21 We also do a cumulative analysis which  
22 would take into effect not only other power plants  
23 in the area, but other sources of pollution of  
24 potential impacts.

25 So regardless of the number of power



1 plants and regardless of number of other types of  
2 industry in the area, we do a thorough and  
3 complete analysis.

4           You asked whether there was two plants  
5 in the same city in the same year in the past, and  
6 the answer is yes. In the Lakeport/Middletown  
7 communities, five plants were in 1979, one in  
8 1980, three in 1981, one in 1982 and two in 1984.  
9 So over a course of six years 12 plants were being  
10 considered by the Energy Commission that were near  
11 by the communities of Lakeport and Middletown.

12           More recently, in 1992 and 1993  
13 Sacramento area was affected. Two plants were  
14 proposed in 1992, two more plants were proposed in  
15 1993, so four plants in two years.

16           MS. LAGANA: Were they permitted?

17           MS. STENNICK: Yes.

18           MR. RICHINS: Yes.

19           (Laughter.)

20           MR. RICHINS: Okay, the second question  
21 is are there other communities in the State of  
22 California where there are more than ten power  
23 plants in a nearby area. I provide you with a map  
24 of the State of California, I can also provide the  
25 same map to the Committee.

1                   If you take a look at that map, that map  
2           shows all the power plants in the State of  
3           California. There are nearly 1000 power plants  
4           located in various locations. You can see by the  
5           map and by the symbols on there, there are many  
6           communities with a number of power plants nearby.  
7           Los Angeles, San Francisco, Los Angeles, San  
8           Diego, Bakersfield, Buttonwillow, Middletown,  
9           Lakeport, Santa Rosa Colfax, Oakland, Burney, I  
10          mean you can just go through there and depending  
11          on what radius you want to look at, there are many  
12          communities where there's numerous power plants.

13                   MS. LAGANA: You said there were 1000 in  
14          the state?

15                   MR. RICHINS: Yeah, if you look at the  
16          table there, there's a little summary. I think  
17          it's actually 987 power plants.

18                   MS. LAGANA: Right.

19                   MR. RICHINS: You also asked a question  
20          regarding compliance. In this particular case  
21          there are 189 conditions of certification. If  
22          this plant were to be approved, and all those  
23          conditions remain, the Energy Commission Staff is  
24          responsible for seeing that those conditions are  
25          complied with during construction and operation.

1                   We do that in many different ways. Site  
2                   visits, monthly reports. We have a complaint  
3                   process. We will receive complaints from the  
4                   public. The Energy Commission Staff has about 76  
5                   staff in the Siting Division that is responsible  
6                   for siting and compliance, along with numerous  
7                   attorneys.

8                   If there are amendment and violations  
9                   involved, then the Commissioners become involved.  
10                  So there are a number of resources that are  
11                  available to the Energy Commission for compliance  
12                  activity.

13                  Currently there are 38 projects in our  
14                  compliance unit right now that have been  
15                  previously approved by the Energy Commission.  
16                  Five other projects were constructed and have been  
17                  closed. And there were nine approved plants, but  
18                  never built. So that's kind of a history of  
19                  plants that have been in our compliance group.

20                  Number four question asked about CEC  
21                  responsibilities over public utility facilities.  
22                  The Energy Commission has authority over all power  
23                  plants that are 50 megawatts and greater that are  
24                  thermal. That took effect in 1976. So any power  
25                  plant built after 1976 or proposed to be built

1 after 1976 that was a thermal power plant 50  
2 megawatts or greater, would be licensed by the  
3 Energy Commission. Any power plant that was less  
4 than 50 megawatts or was proposed and built prior  
5 to 1976 would be the jurisdiction of either the  
6 local government, local city, local county, and/or  
7 the California Public Utilities Commission.

8 Number five talks about does the CEC  
9 require existing facilities to be upgraded to  
10 cleaner technology. I think this question was  
11 answered somewhat in previous discussions when we  
12 were talking about air quality.

13 The Energy Commission would rely on  
14 other jurisdictions, such as the Air District, the  
15 Water Board and so forth, to promulgate rules that  
16 would require retrofitting or upgrading of  
17 existing power plants. We talked about rule 9-11  
18 earlier, which is an example where existing power  
19 plants are required to make improvements by  
20 decreasing NOx by 90 percent.

21 Number six question, CEC require  
22 renewable energy facilities to be built in the  
23 state. I have a long answer for this, but  
24 probably the short answer is that the Energy  
25 Commission has numerous programs to try to address

1 issues of environmental concern. We have energy  
2 efficiency, building standards, research and  
3 development, energy information and power plant  
4 siting.

5 What you're seeing here today is just  
6 one-quarter of the activities within the Energy  
7 Commission. And there's a lot of other activities  
8 that are going on to try to promote building  
9 standards, energy efficiency so that the demand  
10 for electricity is minimized, and then also the  
11 supply is as efficient as possible.

12 MS. LAGANA: Excuse me, just as a point  
13 of clarification here.

14 What I'm asking is, is there a  
15 requirement for renewable energy facilities to  
16 keep pace, because I think at one point in the  
17 staff assessment they said that the reason that  
18 renewable energy was not an alternative source was  
19 because there wasn't enough renewable energy  
20 facilities to meet the demand.

21 I think it was in one of the assessments  
22 where it talked about alternative energies or --

23 HEARING OFFICER GEFTER: It was in the  
24 alternative section of the FSA.

25 MS. LAGANA: Yeah.

1                   MR. RICHINS:   Okay, the Energy  
2                   Commission and the State Legislature does not  
3                   require any renewables to be built.   In AB-1890  
4                   that was passed, there is a market-based program  
5                   to encourage, through market incentives, renewable  
6                   projects.   \$540 million was set aside in that  
7                   legislation that's being administered by the  
8                   Energy Commission to help promote and provide  
9                   marketplace incentives for the renewables  
10                  industry.

11                  That's to take place over four years,  
12                  and the Energy Commission is involved very  
13                  actively in promoting and encouraging through  
14                  market mechanisms, renewable energies.

15                  But you used the word require.   And we  
16                  aren't master planners for the state, and we do  
17                  not have the ability to require developers to do  
18                  anything.   We can send signals and provide  
19                  encouragements, but we haven't been legislated to  
20                  require that type of activity.

21                  HEARING OFFICER GEFTER:   Dick, they  
22                  can't hear you.

23                  MR. RATLIFF:   We're working on  
24                  renewables development and also apportioning money  
25                  from the money that was appropriated for

1       renewables, so.

2                   MS. LAGANA:   In the four-year process,  
3       where is that?

4                   MR. RICHINS:   It goes to 2002, I  
5       believe.

6                   MR. RATLIFF:   I think that's right,  
7       yeah.

8                   MS. LAGANA:   Okay.   Thank you.

9                   MR. RICHINS:   A little bit more on  
10       renewables.   California is the leader in the  
11       nation and in the world on diverse energy sources.  
12       California is the leader in solar, wind and  
13       thermal resource development.

14                   In 1996 California had 40 percent of the  
15       world, not the nation, but the world's geothermal  
16       production; 40 percent of the world's wind  
17       production; and 90 percent of the world's solar  
18       production.

19                   Also, as a sidelight, Calpine  
20       Corporation, the applicant in this case, is the  
21       largest geothermal electric producer in the world.

22                   To give you an example, and it's  
23       summarized on that map there, but of all the power  
24       plants in the State of California, 64 percent of  
25       the plants are renewable energy plants producing

1       about 36 percent of the megawatts. And that's  
2       summarized in that table.

3               And I can also provide you a handout on  
4       that information.

5               MS. LAGANA: So 64 percent producing how  
6       much?

7               MR. RICHINS: 36 percent of the  
8       megawatts.

9               MS. LAGANA: Thanks.

10              MR. RICHINS: You asked in question  
11       number seven where are the locations of the  
12       existing renewable plants in California. I'd  
13       address you to the map.

14              Also, if you go to the California Energy  
15       Commission website, there's something called  
16       databases. All the power plants that are listed  
17       on this map are on a database. And they're  
18       organized in any way you want to organize them,  
19       because they're like in an Excel file, and you can  
20       sort by location, by technology and that type of  
21       thing.

22              MS. LAGANA: Thank you.

23              MR. RICHINS: And then you asked about  
24       locations of proposed renewable energy. Likewise,  
25       I didn't provide a map on that, but if you go to



1 the Energy website under renewables, you'll be  
2 able to see the programs that have been funded out  
3 of AB-1890 money, the \$540 million that we talked  
4 about that is using marketplace incentives to  
5 promote renewables.

6 So if you go to the Energy Commission  
7 website under renewables, you'll find that  
8 information.

9 And then the last question was on  
10 noticing an outreach. I think some of those  
11 questions have been answered by the applicant's  
12 witnesses, by Roberta earlier this evening.

13 And then we filed a response to Joe  
14 Hawkins, a data request. Our response was dated  
15 October 19th, which addresses this issue.

16 And I just might add, in addition to  
17 that I think Roberta Mendonca is available nearly  
18 24 hours a day, and she's made extra effort to be  
19 in the community to provide assistance and  
20 outreach to anyone in the community. And I think  
21 she's done a very excellent job in this case. And  
22 so I just wanted to highlight that.

23 Also, the outreach that the Energy  
24 Commission Staff has done is far and above any  
25 requirement of any state law, and any program in

1 the State of California. And so I would take  
2 issue, I think, with your statement that our  
3 outreach has failed. I would contend that that's  
4 not the case.

5 HEARING OFFICER GEFTER: Thank you. At  
6 this point, that concludes staff's response to  
7 CAP-IT's questions.

8 MS. LAGANA: Is it possible for me to  
9 get the written response on this? Is that okay?

10 MR. RICHINS: I'm going to give you a  
11 whole bunch of handouts right now.

12 MS. LAGANA: Okay, thank you. Well,  
13 whatever he was reading, because I was trying to  
14 take notes.

15 MR. HARRIS: The transcript.

16 MR. RICHINS: Oh, yeah, I can give you  
17 that.

18 HEARING OFFICER GEFTER: And it also  
19 will be in the transcript. This has been on the  
20 record. So you can read the transcript and then  
21 it will have all of Paul's responses.

22 At this point we're going to wind down  
23 and I want to note for the record that the  
24 administrative record in this proceeding is  
25 closed. That we will take no more testimony, no

1 more evidence on any of the topics.

2 And that the only thing pending at this  
3 point is the briefs, which are due November 30th.

4 At this point, the hearing is adjourned.

5 (Whereupon, at 2:20 a.m., the hearing  
6 was adjourned.)

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## CERTIFICATE OF REPORTER

I, DEBI BAKER, an Electronic Reporter,  
do hereby certify that I am a disinterested person  
herein; that I recorded the foregoing California  
Energy Commission Hearing; that it was thereafter  
transcribed into typewriting.

I further certify that I am not of  
counsel or attorney for any of the parties to said  
hearing, nor in any way interested in the outcome  
of said hearing.

IN WITNESS WHEREOF, I have hereunto set  
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